



National Center of Research Resources (NCRR)

ARP XML Format, Schema Definition and XML Generation Process *(Draft)*

January 18, 2004

For Contract NITAAC/CIO-SP2

Prepared by:
Dan Pyles, Senior Consultant



Prepared for:
National Institutes of Health
6701 Democracy Boulevard
Bethesda, MD20892

TABLE OF CONTENTS

1.0 Introduction.....	3
1.1 Scope.....	3
1.2 Purpose.....	3
2.0 Design Tools	3
3.0 Design Overview	3
4.0 Detailed Design.....	4
4.1 ARP2XML User Interface.....	5
4.2 arp2xml.err file	7
4.3 arp2xml.properties File	8
4.4 Use of PDF Files as Inclusions	9
4.5 ARP Tables and Columns included in XML	10
4.6 XML File Format.....	10
4.7 XML Schema	10
4.8 XML Text Field Files	10
4.9 Generated Contents of GCRC Annual Report Package.....	11
4.10 ZIP Package Contents	11
5.0 Installation Instructions.....	11
6.0 Appendix A - ARP Tables and Columns	13
7.0 Appendix B – XML Schema.....	23

1.0 Introduction

1.1 Scope

This document is concerned with developing a standard interface between the GCRC provider services and the NCRR Scientific Information System (SIS) database. The scope of this document is limited to the production of the XML files. The method of transmission for these XML files with their associated attachments and the ingestion of the contents in the NCRR SIS database is covered in a separate document.

1.2 Purpose

This document describes the format of the XML generated from the ARP Microsoft Access 97 database and the XML Schema used to validate the XML. This document discusses the utility program developed to generate the XML from the ARP database.

2.0 Design Tools

The development of the XML Schema (arp.xsd) was performed using Altova XMLSPY Enterprise Edition version 2004 release 4. The development of the ARP2XML process was performed using Microsoft Visual Studio – Visual Basic 6.0 (SP5) for 32-bit Windows.

3.0 Design Overview

The overview of the production of the XML files from the ARP2XML process is illustrated in Figure 3.0. The ARP2XML process resides on the GCRC server. All of the file stores can be on the same server or a different server if access privileges are provided. The property names and location of the file store folders are contained in the arp2xml.properties file that resides in the same folder as the ARP2XML process. The arp.xsd file must also reside in this folder.

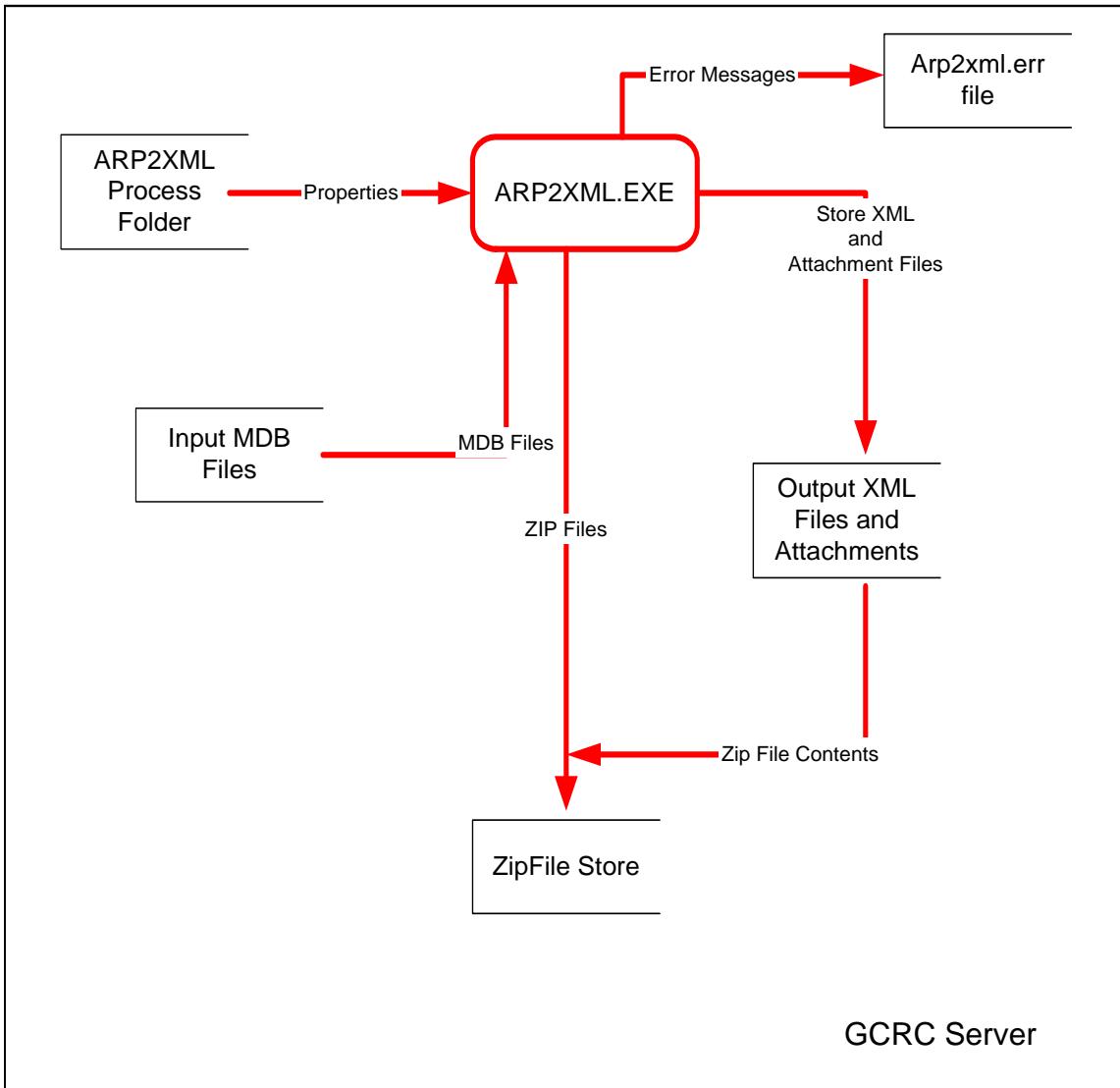


Figure 3.0 ARP2XML Process Overview

4.0 Detailed Design

The ARP2XML process was developed to provide a standard set of XML files from the ARP databases for ingestion into the NCRR SIS database. A goal for this process was to provide some control information externally. This has been accomplished via the `arp2xml.properties` file and is discussed in a later section of this document. Another goal is to provide useful information back to the user of the process interface. This is accomplished via the error messages placed in the err file. All of these are written to the file named `arp2xml.err` located in the folder with the executable. This file is renamed with the grant number replacing the `arp2xml` portion of the err file.

4.1 ARP2XML User Interface

The user interface is illustrated in Figure 4.1 and Figure 4.1a. Figure 4.1b is only applicable if an error has occurred.



Figure 4.1 ARP2XML User Interface before execution start

At startup the arp2xml.properties file is read and the location of the MDB filenames are collected and stored in the textbox labeled Select one Access Database. Only MDB files beginning with RR and ending with the MDB extension are processed. When the Start command button is selected the processing of the selected MDB file commences. If a selection is not made the first file in the list is automatically selected. Only one MDB file is processed for each click of the Start command button. As the MDB file is processed a status bar provides information during the processing and a progress bar provides information concerning the percentage of completion. The MDB file is retained in the textbox list and an entry using the grant number and an extension of xml is displayed in the label Generated XML File. This is illustrated in Figure 4.1a. The full path to the xml file is displayed. The Start command button is always enabled. After the completion of

the zip file creation, the full path to the zip file is displayed in the Generated ZIP File label.

When the creation of the XML file and the zip file is completed, the XML is automatically validated against the XML schema (arp.xsd).

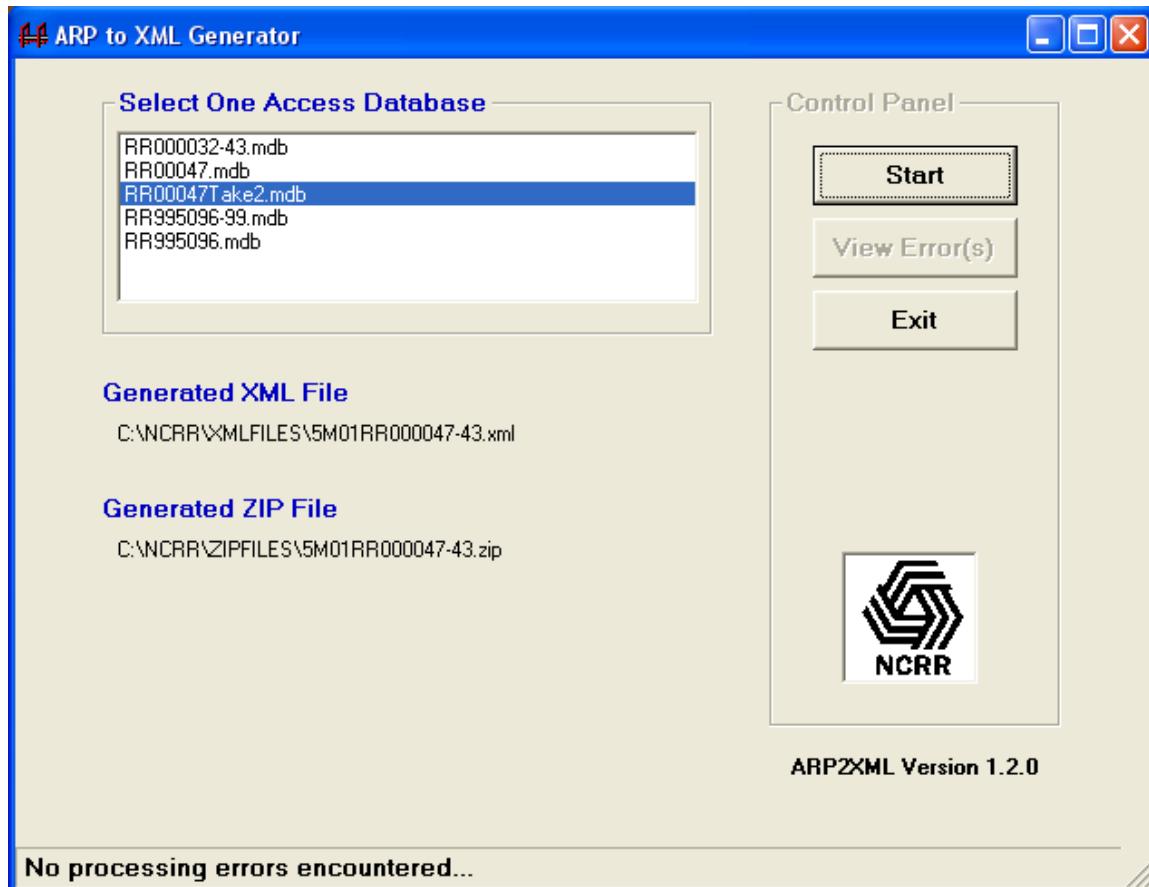


Figure 4.1a ARP2XML User Interface after successful execution

The Figure 4.1b illustrates the user interface when an error occurs. The View Error(s) command button is enabled whenever an error occurs during processing. It is disabled at the beginning of the Start command button processing. The View Error(s) command button allows the user to view the contents of the error file using Windows notepad application. The Exit command button terminates the program.

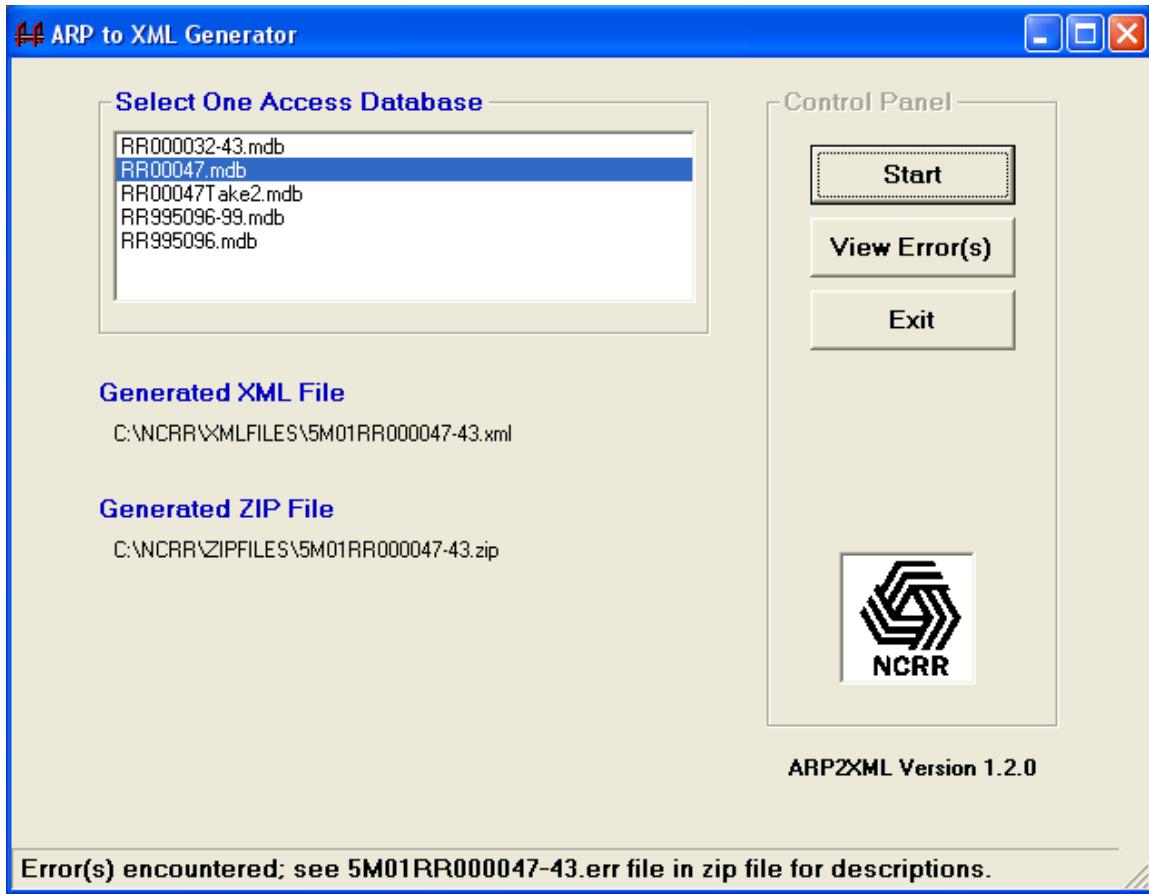


Figure 4.1b ARP2XML User Interface after unsuccessful execution

4.2 *arp2xml.err* file

The contents of the arp2xml.err (this is changed to ‘GrantNumber’.err prior to its inclusion into the zip file) file contains a date/time stamp of when an error occurred and a description of the error and some context information to help identify the cause of the error. This is an example of the contents of this file:

October 05, 2004 17:12:22
isValidFile(E:\NCRR\XMLFILES\5M01RR000080-41MH.err)
Error Message: Error # 0
Error Message: File does not exist at this location.

October 05, 2004 17:13:5
OpenSchemaX()
Error Message: Error # 0
An error has been detected in the processing of M01RR000080MM_DEARBORNJ.MDB

The database file and the resultant XML file have been zipped. Send to NCRR for further analysis.

October 05, 2004 18:1:41

cmdValidateXML_Click()

Error Message: Error # 0

Error in instance (1134, 604)

reason: An invalid character was found in text content.

source: <arp:PROJECT_SUMMARY> The metabolism of threonine in term newborn infant and the effect of enteral feeding on the metabolism of threonine was examined.

The hypothesis is that the oxidation of threonine by the threonine dehydratase pathway will be lower in newborn infants and a large majority of threonine will be catabolized by the non-oxidative pathway. The specific aims of the study were to examine the catabolic pathways of threonine in newborn infants and to examine the effect of enteral nutrient administration on the catabolism of threonine. Full term appropriate for gestation infants (40 Check for errors in GrantNumber, Email, sex, race, ethnicity, month or date fields.

The file: E:\NCRR\XMLFILES\5M01RR000080-41MH.xml

and the associated database file will be moved to the error file locations.

October 06, 2004 10:52:27

Form_Load()

Error Message: Error # 5 Invalid procedure call or argument

No MDB files are available for processing.

Check arp2xml.properties file to ensure correct path is specified.

These messages provides a means of debugging the application when errors occur. The arp2xml.err file is created if it does not exist. If it does exist, new error messages are appended to the file.

Where possible in the error message text, a remedial action is given to help debug the problem.

4.3 *arp2xml.properties* File

The contents of the arp2xml.properties file is as follows:

#Note: These are for storage of the input MDB file, output XML and ZIP Files.

MDB_PATH=C:\NCRR\MDBFILES

XML_PATH=C:\NCRR\XMLFILES

ZIPFILES=C:\NCRR\ZIPFILES

PDFFILES=C:\NCRR\PDFFILES

#Note: This identified the location of the System32 folder on this computer.

SYSTEM32=C:\WINDOWS\SYSTEM32

#Note: These are the identifiers for the document references embedded in the text.

FILEDELIMITER=FILE:

DOCTYPES=PDF|

MDBTYPE=RR

The property name must remain as specified but the location of the individual file stores are tailored to the site specifications. Read/write access privileges must be provided to these file stores. The # sign in the first column indicates a comment line.

Blank lines will also be processed as a comment line.

The only type of external files currently being retrieved are PDF files. Each occurrence of an external file reference must be preceded by the value of the FILEDELIMITER variable, FILE:. The following is a valid example of an external file reference:

The abstract for this grant can be found in [FILE:myAbstract.pdf](#), please review this file for further information. Note that the myAbstract file does not contain a full path name; the assumption is that all PDF files are located in the location specified by the PDFFILES identifier.

4.4 Use of PDF Files as Inclusions

PDF files may be referenced within the body of any of the ARP database fields identified in the table below. The PDF files should be placed within the directory specified in the installation or the PDFFILES value in the arp2xml.properties file.

PDF files to be referenced must contain the Principal Investigator, the Grant Number, and the Project Identifier at the top of each page.

In the individual field the PDF file must be referenced as “[FILE:myAbstract.pdf](#)“ with myAbstract.pdf as the name of the PDF file to be included from the PDFFILES subdirectory.

ARP MDB Table	ARP MDB Filename	Description
CCAPS	SCIACT_TXT	Summary of scientific activities
CMCAPS	SCIACT_TXT	Summary of scientific activities
N_ADMIN	ADMIN_NAR	Narrative text
N_HILI	SC_HILITES	Text with statement of hypotheses and rational for research, concise description of methodology, and discussion of results.
SPJPRO	SUMMARY	Sub Project summary
CRFF	PROJECT_SUMMARY	Project summary
SPJPRO	RESULTS	Progress report

4.5 ARP Tables and Columns included in XML

The table located in Appendix A- ARP Tables and Columns, identifies the specific tables from the ARP database that are included in the XML. Any other tables not identified in the Appendix A that may be included in the ARP database are excluded. A XML file is case sensitive. The table and column names are expected to continue to use the names in the same case as depicted in Appendix A. The first column of the table identifies the XML namespace prefix in the XML list provided in Appendix C – Sample XML.

4.6 XML File Format

The XML format is provided in Appendix C – Sample XML. The overall structure of the XML begins with the document tag, GCRCReport, with the namespace prefix prepended (i.e., arp: GCRCReport). The document node also identifies the namespaces associated with the XML file and the location of the schema file. This is followed by the individual tablename node, i.e., arp:ANCILLARIES. Each tablename node is followed by a <arp:ROWSET> node that encapsulates all of the <arp:ROW> node(s) for the associated tablename. After each table, in the order specified by Appendix A, have been processed the </ arp: GCRCReport > node terminates the XML.

After the completion of the ARP database table information retrieval and processing in XML, the external PDF file references are collected and placed in the FILES node of the XML.

4.7 XML Schema

The XML Schema illustrated in Appendix B is the contents of the arp.xsd file. The XML schema defines the structure, order and content of the generated XML. Where possible individual restrictions are applied to limit the size of data fields, the format of fields and the content of fields.

4.8 XML Text Field Files

The current implementation of the XML generation process writes out a separate file containing the text of the nodes in the XML. In place of the text, the filename of the file is placed in the XML. The database tables and columns using a dot notation to separate the table name from the column name are as follows:

- N_ADMIN.ADMIN_NAR
- N_EQUP.EQUIP_NAME
- DESMST .DESC
- N_HILI.SC_HILITES
- SPJPRO.SUMMARY
- CCAPS.SCIACT_TXT
- CMAPS.SCIACT_TXT
- CRFF.PROJECT_SUMMARY

- SPJPRO.SHORTTITLE
- PUB.TITLE
- N_EQUP.JUSTIFICAT
- SPJPRO.LONGTITLE
- SPJPRO.RESULTS

The file names conform to a naming convention as follows:

GrantNumber_YYYYMMDDHHMMSSsss_ADMIN_NAR.txt, where sss represents the milliseconds for the time.

For example, 5M01RR000056-42MW_200409290953036_ADMIN_NAR.txt follows this format.

This approach is expected to be reversed in the future so that in lieu of putting the text into a file and placing the filename in the XML, the user places a filename in the database that points to an external file containing the text. This approach serves for any type of file including pdf, rtf, doc, txt and image files.

4.9 Generated Contents of GCRC Annual Report Package

After processing by the ARP2XML program , the resultant contents of the GCRC annual report consists of the XML report file and numerous text files. All output files are named with the grant number in the filename to bind them together. These files are collected into a zip file named with the grant number. After a successful zipping operation, the xml report file and all of the text files are deleted from the file store.

4.10 ZIP Package Contents

The zip file contains the following contents:

- XML file named using the grantnumber.xml convention.
- Error log file named using the grantnumber.err convention.
- Message digest file named using the grantnumber.md5 convention.
- Access database file named using the grantnumber.mdb convention.
- Text file named according to the convention provided in section 4.7 of this document.
- Any referenced PDF files.

5.0 Installation Instructions

The program is self installing. The following steps should be followed to ensure a successful installation:

Verify that WINZIP is installed on your workstation.

Login with admin privileges to your workstation.

If your workstation is not configured to display file extensions.

1. Select the Start button, right click to Explore.
2. On Tool menu, click Folder Options and then View.
3. Verify that “Hide file extensions for known file types” is NOT checked.

1. Copy file from email and paste file to desired location.
2. If the file is name ARP2XMLInstall.ex_ rename it to ARP2XMLInstall.exe.
3. Double Click the icon to install ARP2XML.exe and follow the on-screen instructions.
4. Verify your file folder locations.
5. After the installation is complete, click the icon on your desktop to run ARP2XML application.

6.0 Appendix A - ARP Tables and Columns

SCHEMA NAMESPACE PREFIX	TABLE NAME AND XML TAG NAME	COLUMN NAME AND XML TAG NAME
Arp	ANCILLARIES	COSTCENT GROSS_AI1 GROSS_BI1 ADJUSTI1 GROSS_AI2 GROSS_BI2 ADJUSTI2 GROSS_AO1 GROSS_BO1 ADJUSTO1 GROSS_AO2 GROSS_BO2 ADJUSTO2 UNIQUEFIELD GrantNumber
arp	CCAPS	CCAPS_NAM START_DATE END_DATE SCIACT_TXT CCAPSPIDS UNIQUEFIELD GrantNumber
arp	CEN_IP	AGE A_ADMIN B_ADMIN D_ADMIN A_DAYS B_DAYS D_DAYS GrantNumber
arp	CEN_OP	LEN_STAY A_VISITS B_VISITS C_VISITS D_VISITS A_ORVS

		B_ORVS GrantNumber
arp	CEN_OPAGE	AGE A_VISITS B_VISITS D_VISITS A_ORVS B_ORVS GrantNumber
arp	CEN_PS	YR MON DAYS_OPEN A_DAYS B_DAYS C_DAYS D_DAYS SB_DAYS SD_DAYS A_VISITS B_VISITS C_VISITS D_VISITS A_ORVS B_ORVS GrantNumber
arp	CEN_SB	AGE A_ADMIN B_ADMIN D_ADMIN A_DAYS B_DAYS D_DAYS GrantNumber
arp	CENTER	AWRD_BEDS AWRD_IPA AWRD_IPB AWRD_IPC AWRD_IPD AWRD_SBA AWRD_SBB AWRD_SBD AWRD_OPA AWRD_OPB AWRD_OPC AWRD_OPD

		RATE_CHG RT_CHG_DAT DISCRETE CAMPDATAPATH ARPDATAPATH LEFTMARGIN PAGELENGTH ARPPASSWORD NIHFILESUFFIX GrantNumber
arp	CMCAPS	CCAPS_NAM START_DATE END_DATE SCIACT_TXT CCAPSSPIDS UNIQUEFIELD GrantNumber
arp	CORELB	TESTS TESTNO CORELBSPIDS NonSPIDUsage UNIQUEFIELD GrantNumber
arp	CRFF	PERSON_ID MENTOR_ID SPECIALTY PERIOD_START PERIOD_END FUNDSREC PROJECT_TITLE PROJECT_SUMMARY SPIDs UNIQUEFIELD GrantNumber
arp	DESMST	DESC UNIQUEFIELD GrantNumber
arp	FTE_STATS	ProgramDirectionFTE AdministrationFTE NutritionFTE InformaticsFTE BiostatisticianFTE NursingFTE RSAFTE

		CoreLabFTE OtherFTE GrantNumber
arp	INVESTIG	LASTNAME FIRSTNAME MIDDLE DEGREE DEPT NONHOST CAP MCAP CRS CAMPName UNIQUEFIELD NAME_SUFFIX GrantNumber
arp	MEDSTU	PERSON_ID MENTOR_ID DEGREES_SOUGHT PERIOD_START PERIOD_END FUNDSREC PROJECT_TITLE PROJECT_SUMMARY SPIDs UNIQUEFIELD GrantNumber
arp	N_ADMIN	ADMIN_KEY ADMIN_NAR UNIQUEFIELD GrantNumber
arp	N_EQUP	EQUIP_NAME EQUIP_COST SERIAL_NO JUSTIFICAT UNIQUEFIELD GrantNumber
arp	N_GCRC	MEMBER_ID CHAIRPERSON AREA_OF_EXPERTISE VOTING UNIQUEFIELD GrantNumber
arp	N_HILI	HILTITLE

		KEYWORD1 KEYWORD2 KEYWORD3 SC_HILITES N_HILISPIDS UNIQUEFIELD GrantNumber
arp	PC_CO1	SUPPLIER INPT_COST OUTPT_COST UNIQUEFIELD GrantNumber
arp	PC_CO2	SUPPLIER INPT_COST OUTPT_COST UNIQUEFIELD GrantNumber
arp	PC_CR1	SOURCE IN_CREDIT OUT_CREDIT UNIQUEFIELD GrantNumber
arp	PC_CR2	SOURCE IN_CREDIT OUT_CREDIT UNIQUEFIELD GrantNumber
arp	PCAPS	PCAPS_NAM CURR_APP CURR_ADD CURR_PHONE PER_TEACH PER_CRES PER_BRES PER_PPRAC PER_OTHER OTHER_SPEC UNIQUEFIELD GrantNumber
arp	PCCAR1	PRO_RDATE PUB_RDATE RT_COST PD_ADAYS PD_COST

		SB_ADAYS SB_COST CR_BDAYS CR_BCOST CR_CDAYS CR_CCOST CR_DDAYS CR_DCOST ANC_ADAYS ANC_ACOST ANC_BDAYS ANC_BCOST ANC_SBADAY ANC_SBACST ANC_SBBDAY ANC_SBBCST SP_CHG ANC_AVISIT ANC_AOCOST ANC_BVISIT ANC_BOCAST OCR_BDAYS OCR_BCOST OCR_CDAYS OCR_CCOST OCR_DDAYS OCR_DCOST ANC_ONLY_CHG ANC_ORVCOST GrantNumber
arp	PCCAR2	PRO_RDATE PUB_RDATE RT_COST PD_ADAYS PD_COST SB_ADAYS SB_COST CR_BDAYS CR_BCOST CR_CDAYS CR_CCOST CR_DDAYS CR_DCOST ANC_ADAYS ANC_ACOST

		ANC_BDAYS ANC_BCOST ANC_SBADAY ANC_SBACST ANC_SBBDAY ANC_SBBCST SP_CHG ANC_AVISIT ANC_AOCOST ANC_BVISIT ANC_BOCCOST OCR_BDAYS OCR_BCOST OCR_CDAY OCR_CCOST OCR_DDAY OCR_DCOST ANC_ONLY_CHG ANC_ORVCOST GrantNumber
arp	PMCAPS	PCAPS_NAM CURR_APP CURR_ADD CURR_PHONE PER_TEACH PER_CRES PER_BRES PER_PPRAC PER_OTHER OTHER_SPEC UNIQUEFIELD GrantNumber
arp	PUB	PUBTYPE PMID PUBCREDIT PUBCAPS PUBSPIDS AUTHORS TITLE JOURNAL VOLUME PAGE PUBYEAR ACCEPTDATE SORTFIELD

		SC_HILITE PrintIndex CAMPPublicat UNIQUEFIELD GrantNumber
arp	RSUPRT	INV_NO KIND AGENCY GRANT TOT_FUNDS GRANTSTART GRANTEND RSUPRTSPIDS ORG_NAME UNIQUEFIELD GrantNumber
arp	SPJETH	protocolid ethprot patientid sex age ethnicity race patientname uniquefield GrantNumber
arp	SPJINV	protocolid inv_prot inv_no inv_type uniquefield GrantNumber
arp	SPJPRO	PROTOCOL SPID SHORTTITLE LONGTITLE AIDS INPAT_A SCAT_A OUTPAT_A SCVS_A INPAT_B SCAT_B OUTPAT_B SCVS_B

		INPAT_D SCAT_D OUTPAT_D SCVS_D A_ORVS B_ORVS SYS_MAN BIO_STAT NUT_DEPT CORE_LAB SUMMARY RESULTS STARTDATE ENDDATE EXPNUMPATS ANONLY MULTICENTE CLINTRIAL PHASE UNIQUEFIELD pi_last pi_first pi_middle pi_degree pi_dept pi_nonhost pi_cap pi_mcap pi_crs num_inv numnonhost GrantNumber
arp	TPAGE	GRANT_NO GRANT_TIT REC_INST HP_SCHOOL BEG REP D END REP D PD_ID PD_TITLE SITE_PHONE EMAIL FAX TOTAL_INBEDS TOTAL_INBEDS_OUT

		TOTAL_OUT_ROOMS GrantNumber
arp	FILES	USER_FILENAME USER_FILENAME UID_FILENAME TABLE_NAME COLUMN_NAME GRANTNUMBER VALID LOCATION SPID UNIQUEFIELD

7.0 Appendix B – XML Schema

The XML Schema used to validate the XML produced from the ARP database is arp.xsd. The arp.xsd file contents are presented as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v2004 rel. 4 U (http://www.xmlspy.com) by Dan Pyles (NIH) -->
<xsschema targetNamespace="http://www.arpgcrc.nih.gov" elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:arp="http://www.arpgcrc.nih.gov" xmlns:xss="http://www.w3.org/2001/XMLSchema">
<!--This is XML Schema file was created to validate the status report XML file created by the GCRCs-->

<!--
     Define restrictions for database string input
-->
<xssimpleType name="str1">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="1"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str2">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="2"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str3">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="3"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str4">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="4"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str10">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="10"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str12">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="12"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str13">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="13"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str14">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
        <xss:maxLength value="14"/>
    </xssrestriction>
</xssimpleType>
<xssimpleType name="str15">
    <xssrestriction base="xss:string">
        <xss:minLength value="0"/>
    </xssrestriction>
</xssimpleType>
```

```

                <xsmaxLength value="15"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str17">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="17"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str20">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="20"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str21">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="21"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str25">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="25"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str30">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="30"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str35">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="35"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str40">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="40"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str50">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="50"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str60">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="60"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str70">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="70"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str80">
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xsmaxLength value="80"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:simpleType name="str100">

```

```

<xs:restriction base="xs:string">
    <xs:minLength value="0"/>
    <xs:maxLength value="100"/>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="str200">
    <xs:restriction base="xs:string">
        <xs:minLength value="0"/>
        <xs:maxLength value="200"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="str255">
    <xs:restriction base="xs:string">
        <xs:minLength value="0"/>
        <xs:maxLength value="255"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="str1000">
    <xs:restriction base="xs:string">
        <xs:minLength value="0"/>
        <xs:maxLength value="1000"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="str4000">
    <xs:restriction base="xs:string">
        <xs:minLength value="0"/>
        <xs:maxLength value="4000"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define the restriction for date columns
-->
<!--This should be a date type but a string type validates as a date and does not enforce yyyy-mm-dd format-->
<xs:simpleType name="DateColumnType">
    <xs:restriction base="xs:string">
        <xs:pattern value="([1-9]|1[012])[-/.]([1-9]|1[2][0-9]|3[01])[-/.](18|19|20)\d\d"/>
        <xs:pattern value="(18|19|20)\d\d[-/.]([1-9]|1[012])[-/.]([1-9]|1[2][0-9]|3[01])"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define the restriction for the GrantNumber columns
-->
<xs:simpleType name="GrantNumberType">
    <xs:restriction base="xs:string">
        <xs:minLength value="14"/>
        <xs:maxLength value="17"/>
        <xs:pattern value="(1|2|3|4|5|7)M01RR[0-9]{6}-[0-9]{2}"/>
        <xs:pattern value="(1|2|3|4|5|7)M01RR[0-9]{6}-[0-9]{2}[A-Z]{2}"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define a month range check 1-12; 0 means no value provided
-->
<xs:simpleType name="MonthType">
    <xs:restriction base="xs:byte">
        <xs:minInclusive value="0"/>
        <xs:maxInclusive value="12"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define a logic type check
-->
<xs:simpleType name="LogicType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="False"/>
        <xs:enumeration value="True"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define degree type check
-->

```

```
-->
<xs:simpleType name="DegreeType">
  <xs:restriction base="arp:str255">
    <!--enumeration value="MVSC"/>
    <enumeration value="MT"/>
    <enumeration value="MSP"/>
    <enumeration value="MST"/>
    <enumeration value="MSIE"/>
    <enumeration value="MSSA"/>
    <enumeration value="MSLS"/>
    <enumeration value="MSM"/>
    <enumeration value="MSEM"/>
    <enumeration value="MSCE"/>
    <enumeration value="MSES"/>
    <enumeration value="MPS"/>
    <enumeration value="MSJ"/>
    <enumeration value="MSL"/>
    <enumeration value="MID"/>
    <enumeration value="MIE"/>
    <enumeration value="MMS"/>
    <enumeration value="MMSC"/>
    <enumeration value="ML"/>
    <enumeration value="MM"/>
    <enumeration value="MME"/>
    <enumeration value="MJ"/>
    <enumeration value="MJD"/>
    <enumeration value="MPHE"/>
    <enumeration value="MSIH"/>
    <enumeration value="MHPE"/>
    <enumeration value="MALS"/>
    <enumeration value="MAS"/>
    <enumeration value="MAT"/>
    <enumeration value="MBS"/>
    <enumeration value="MC"/>
    <enumeration value="MBCH"/>
    <enumeration value="MBC"/>
    <enumeration value="MAPA"/>
    <enumeration value="MCH"/>
    <enumeration value="MCHE"/>
    <enumeration value="MCP"/>
    <enumeration value="MCS"/>
    <enumeration value="MDA"/>
    <enumeration value="MDIV"/>
    <enumeration value="MFA"/>
    <enumeration value="MNED"/>
    <enumeration value="MES"/>
    <enumeration value="RT"/>
    <enumeration value="RB"/>
    <enumeration value="DBA"/>
    <enumeration value="DCH"/>
    <enumeration value="DCHE"/>
    <enumeration value="DEN"/>
    <enumeration value="DHSC"/>
    <enumeration value="DI"/>
    <enumeration value="DPA"/>
    <enumeration value="MSCD"/>
    <enumeration value="DP"/>
    <enumeration value="DPHI"/>
    <enumeration value="DPM"/>
    <enumeration value="DPHL"/>
    <enumeration value="DOD"/>
    <enumeration value="DPB"/>
    <enumeration value="DR"/>
    <enumeration value="DRP"/>
    <enumeration value="DS"/>
    <enumeration value="DSB"/>
    <enumeration value="DSM"/>
    <enumeration value="DVSC"/>
    <enumeration value="DRPH"/>
    <enumeration value="DRSC"/>
```

```

<enumeration value="ED"/>
<enumeration value="EE"/>
<enumeration value="EDS"/>
<enumeration value="EDM"/>
<enumeration value="EED"/>
<enumeration value="ESM"/>
<enumeration value="TD"/>
<enumeration value="PD"/>
<enumeration value="DPHY"/>
<enumeration value="DPS"/>
<enumeration value="PSTH"/>
<enumeration value="DPHC"/>
<enumeration value="PHRC"/>
<enumeration value="DHOM"/>
<enumeration value="DPAC"/>
<enumeration value="OMD"/>
<enumeration value="SB"/>
<enumeration value="BIOL"/>
<enumeration value="EDU"/>
<enumeration value="ENG"/>
<enumeration value="NS"/>
<enumeration value="NR"/>
<enumeration value="PA"/>
<enumeration value="PHM"/>
<enumeration value="PHS"/>
<enumeration value="PHY"/>
<enumeration value="PHYS"/>
<enumeration value="PS"/>
<enumeration value="SS"/>
<enumeration value="BASW"/>
<enumeration value="SCB"/>
<enumeration value="NA"/>
<enumeration value="SPEC"/>
<enumeration value="DPHE"/>
<enumeration value="BPHE"/>
<enumeration value="MRC"/>
<enumeration value="MEEN"/>
<enumeration value="DEEN"/>
<enumeration value="BSJ"/>
<enumeration value="MNSC"/>
<enumeration value="MNS"/>
<enumeration value="ANTH"/>
<enumeration value="BVSC"/>
<enumeration value="BVMS"/>
<enumeration value="FNP"/>
<enumeration value="FACP"/>
<enumeration value="FSA"/>
<enumeration value="FRCP"/>
<enumeration value="FRS"/>
<enumeration value="FRCS"/>
<enumeration value="FACC"/>
<enumeration value="FACA"/>
<enumeration value="FACH"/>
<enumeration value="FRAC"/>
<enumeration value="ESQ"/>
<enumeration value="FACM"/>
<enumeration value="FAAP"/>
<enumeration value="FICS"/>
<enumeration value="FRC"/>
<enumeration value="FFPH"/>
<enumeration value="BAAS"/>
<enumeration value="MEE"/>
<enumeration value="MHSC"/>
<enumeration value="MP"/>
<enumeration value="MR"/>
<enumeration value="OH"/>
<enumeration value="MUP"/>
<enumeration value="MEM"/>
<enumeration value="DCS"/>
<enumeration value="EDDC"/>

```

```

<enumeration value="ADCP"/>
<enumeration value="ARNP"/>
<enumeration value="ARRT"/>
<enumeration value="ASCP"/>
<enumeration value="RNC"/>
<enumeration value="RPH"/>
<enumeration value="SBIE"/>
<enumeration value="AC"/>
<enumeration value="ADN"/>
<enumeration value="AES"/>
<enumeration value="AGE"/>
<enumeration value="AN"/>
<enumeration value="ASN"/>
<enumeration value="BOTH"/>
<enumeration value="BAG"/>
<enumeration value="ABA"/>
<enumeration value="DOTH"/>
<enumeration value="MOTH"/>
<enumeration value="MAP"/>
<enumeration value="ENVD"/>
<enumeration value="BMED"/>
<enumeration value="MBED"/>
<enumeration value="MCG"/>
<enumeration value="MMED"/>
<enumeration value="PHRD"/>
<enumeration value="PHYD"/>
<enumeration value="RPN"/>
<enumeration value="RBP"/>
<enumeration value="RND"/>
<enumeration value="PNP"/>
<enumeration value="BHS"/>
<enumeration value="BJ"/>
<enumeration value="BSF"/>
<enumeration value="BSM"/>
<enumeration value="BSOE"/>
<enumeration value="BTHE"/>
<enumeration value="MBBC"/>
<enumeration value="MFT"/>
<enumeration value="MPT"/>
<enumeration value="MSHE"/>
<enumeration value="MSHP"/>
<enumeration value="THM"/>
<enumeration value="MPHI"/>
<enumeration value="PAC"/>
<enumeration value="PHAR"/>
<enumeration value="MSSC"/>
<enumeration value="MSBI"/>
<enumeration value="MSCS"/>
<enumeration value="MSED"/>
<enumeration value="MSHA"/>
<enumeration value="MSPT"/>
<enumeration value="MTOM"/>
<enumeration value="MTS"/>
<enumeration value="NP"/>
<enumeration value="OHST"/>
<enumeration value="MVB"/>
<enumeration value="MUDR"/>
<enumeration value="MPVM"/>
<enumeration value="MLIS"/>
<enumeration value="MLN"/>
<enumeration value="MRP"/>
<enumeration value="MPPM"/>
<enumeration value="MSMI"/>
<enumeration value="MFN"/>
<enumeration value="MTCH"/>
<enumeration value="MTC"/>
<enumeration value="MIB"/>
<enumeration value="MHSM"/>
<enumeration value="MFOM"/>
<enumeration value="MPPA"/>

```

```

<enumeration value="MHDL"/>
<enumeration value="MCAT"/>
<enumeration value="MCIS"/>
<enumeration value="MAN"/>
<enumeration value="MDCM"/>
<enumeration value="AOCN"/>
<enumeration value="FACS"/>
<enumeration value="MIEE"/>
<enumeration value="BDSC"/>
<enumeration value="MDSC"/>
<enumeration value="MVS"/>
<enumeration value="VMB"/>
<enumeration value="BVM"/>
<enumeration value="DCP"/>
<enumeration value="DMRT"/>
<enumeration value="DTM"/>
<enumeration value="DTMH"/>
<enumeration value="DMRD"/>
<enumeration value="AYUR"/>
<enumeration value="DIC"/>
<enumeration value="DMLT"/>
<enumeration value="AIA"/>
<enumeration value="BSPA"/>
<enumeration value="BSPE"/>
<enumeration value="PHN"/>
<enumeration value="PHPM"/>
<enumeration value="BSPT"/>
<enumeration value="BSSP"/>
<enumeration value="BSTH"/>
<enumeration value="BSO"/>
<enumeration value="BSOT"/>
<enumeration value="BSP"/>
<enumeration value="BSPH"/>
<enumeration value="BSRT"/>
<enumeration value="DACH"/>
<enumeration value="DAE"/>
<enumeration value="DAS"/>
<enumeration value="BVE"/>
<enumeration value="BVA"/>
<enumeration value="BWE"/>
<enumeration value="DSIM"/>
<enumeration value="MBCM"/>
<enumeration value="MO"/>
<enumeration value="MOIG"/>
<enumeration value="MOL"/>
<enumeration value="MPE"/>
<enumeration value="MRTE"/>
<enumeration value="MSBA"/>
<enumeration value="MSBC"/>
<enumeration value="MSCP"/>
<enumeration value="MSF"/>
<enumeration value="MSGM"/>
<enumeration value="MSIR"/>
<enumeration value="MBM"/>
<enumeration value="MCD"/>
<enumeration value="DCD"/>
<enumeration value="DCM"/>
<enumeration value="DCPT"/>
<enumeration value="DDM"/>
<enumeration value="DF"/>
<enumeration value="DFA"/>
<enumeration value="DFL"/>
<enumeration value="DFS"/>
<enumeration value="DHA"/>
<enumeration value="DHH"/>
<enumeration value="DIA"/>
<enumeration value="DIE"/>
<enumeration value="DIL"/>
<enumeration value="DIRE"/>
<enumeration value="DJ"/>

```

```

<enumeration value="DJS"/>
<enumeration value="DJSC"/>
<enumeration value="DJUR"/>
<enumeration value="DL"/>
<enumeration value="DLE"/>
<enumeration value="DLI"/>
<enumeration value="DLL"/>
<enumeration value="DLM"/>
<enumeration value="DMJ"/>
<enumeration value="DMT"/>
<enumeration value="DOE"/>
<enumeration value="DOL"/>
<enumeration value="OPTH"/>
<enumeration value="DPE"/>
<enumeration value="ABPP"/>
<enumeration value="ABD"/>
<enumeration value="AHT"/>
<enumeration value="ATC"/>
<enumeration value="BCSW"/>
<enumeration value="BMD"/>
<enumeration value="MOB"/>
<enumeration value="BSCS"/>
<enumeration value="BSSN"/>
<enumeration value="BOC"/>
<enumeration value="STAT"/>
<enumeration value="ACP"/>
<enumeration value="DCRM"/>
<enumeration value="UNK"/>
<enumeration value="JD"/>
<enumeration value="CSW"/>
<enumeration value="LPN"/>
<enumeration value="CRNP"/>
<enumeration value="CNM"/>
<enumeration value="CDE"/>
<enumeration value="AB"/>
<enumeration value="BA"/>
<enumeration value="BCH"/>
<enumeration value="BD"/>
<enumeration value="BENG"/>
<enumeration value="BM"/>
<enumeration value="BS"/>
<enumeration value="BSD"/>
<enumeration value="BSN"/>
<enumeration value="BSNE"/>
<enumeration value="BSW"/>
<enumeration value="DC"/>
<enumeration value="DDS"/>
<enumeration value="DED"/>
<enumeration value="DENG"/>
<enumeration value="DHS"/>
<enumeration value="DLS"/>
<enumeration value="DMD"/>
<enumeration value="DMS"/>
<enumeration value="DMSC"/>
<enumeration value="DN"/>
<enumeration value="DNED"/>
<enumeration value="DNS"/>
<enumeration value="DNSC"/>
<enumeration value="DO"/>
<enumeration value="DPH"/>
<enumeration value="DSC"/>
<enumeration value="DSN"/>
<enumeration value="DSW"/>
<enumeration value="DVM"/>
<enumeration value="DVS"/>
<enumeration value="EDD"/>
<enumeration value="MA"/>
<enumeration value="MB"/>
<enumeration value="MBBS"/>
<enumeration value="MCHD"/>

```

```

<enumeration value="MCHR"/>
<enumeration value="MD"/>
<enumeration value="MDS"/>
<enumeration value="MENG"/>
<enumeration value="MLS"/>
<enumeration value="MN"/>
<enumeration value="MPH"/>
<enumeration value="MPHN"/>
<enumeration value="MPM"/>
<enumeration value="MRCP"/>
<enumeration value="MS"/>
<enumeration value="MSD"/>
<enumeration value="MSN"/>
<enumeration value="MSNE"/>
<enumeration value="MSW"/>
<enumeration value="OD"/>
<enumeration value="PHB"/>
<enumeration value="PHD"/>
<enumeration value="PHRM"/>
<enumeration value="RN"/>
<enumeration value="SCD"/>
<enumeration value="VMD"/>
<enumeration value="MEDS"/>
<enumeration value="RD"/>
<enumeration value="BDS"/>
<enumeration value="FAAN"/>
<enumeration value="MBA"/>
<enumeration value="OT"/>
<enumeration value="OTR"/>
<enumeration value="OTRL"/>
<enumeration value="BSEE"/>
<enumeration value="AS"/>
<enumeration value="PT"/>
<enumeration value="MSME"/>
<enumeration value="MSEE"/>
<enumeration value="AA"/>
<enumeration value="AAS"/>
<enumeration value="BC"/>
<enumeration value="BBS"/>
<enumeration value="BBA"/>
<enumeration value="BNS"/>
<enumeration value="ABJ"/>
<enumeration value="AD"/>
<enumeration value="AM"/>
<enumeration value="AMLS"/>
<enumeration value="BAE"/>
<enumeration value="BCHD"/>
<enumeration value="BCHE"/>
<enumeration value="BE"/>
<enumeration value="BED"/>
<enumeration value="BEE"/>
<enumeration value="BES"/>
<enumeration value="BFA"/>
<enumeration value="BGS"/>
<enumeration value="BLS"/>
<enumeration value="BME"/>
<enumeration value="BMS"/>
<enumeration value="BMSC"/>
<enumeration value="BN"/>
<enumeration value="BPH"/>
<enumeration value="BSA"/>
<enumeration value="BSAE"/>
<enumeration value="BSME"/>
<enumeration value="BSR"/>
<enumeration value="BSMT"/>
<enumeration value="BT"/>
<enumeration value="BVS"/>
<enumeration value="BTEC"/>
<enumeration value="ME"/>
<enumeration value="MED"/>

```

```

<enumeration value="MHA"/>
<enumeration value="MHS"/>
<enumeration value="MHSA"/>
<enumeration value="MIS"/>
<enumeration value="MNA"/>
<enumeration value="MPA"/>
<enumeration value="MPP"/>
<enumeration value="MSA"/>
<enumeration value="MSC"/>
<enumeration value="MSCN"/>
<enumeration value="MSPH"/>
<enumeration value="MSS"/>
<enumeration value="MSSW"/>
<enumeration value="NURS"/>
<enumeration value="OTH"/>
<enumeration value="PH"/>
<enumeration value="PSYD"/>
<enumeration value="SCM"/>
<enumeration value="MSE"/>
<enumeration value="PHC"/>
<enumeration value="PHMD"/>
<enumeration value="VS"/>
<enumeration value="RPD"/>
<enumeration value="ACSW"/>
<enumeration value="ASA"/>
<enumeration value="BSCN"/>
<enumeration value="ARCH"/>
<enumeration value="ABR"/>
<enumeration value="AMD"/>
<enumeration value="ASS"/>
<enumeration value="BAC"/>
<enumeration value="BAS"/>
<enumeration value="BASC"/>
<enumeration value="BSBA"/>
<enumeration value="BSBE"/>
<enumeration value="BSC"/>
<enumeration value="BSCE"/>
<enumeration value="BSCH"/>
<enumeration value="BSDD"/>
<enumeration value="BSE"/>
<enumeration value="BSIE"/>
<enumeration value="BPHA"/>
<enumeration value="BSEM"/>
<enumeration value="BSIM"/>
<enumeration value="BSED"/>
<enumeration value="DD"/>
<enumeration value="DDSC"/>
<enumeration value="DE"/>
<enumeration value="DES"/>
<enumeration value="DM"/>
<enumeration value="DMA"/>
<enumeration value="SD"/>
<enumeration value="PHG"/>
<enumeration value="SJD"/>
<enumeration value="SM"/>
<enumeration value="SMD"/>
<enumeration value="SMEE"/>
<enumeration value="THD"/>
<enumeration value="SBEE"/>
<enumeration value="SID"/>
<enumeration value="SCI"/>
<enumeration value="RM"/>
<enumeration value="PED"/>
<enumeration value="PE"/>
<enumeration value="ND"/>
<enumeration value="MV"/-->
</xs:restriction>
</xs:simpleType>
<!--
Define a sex type check

```

```

-->
<!--Sex 0=Previous unknown
    1=Female
    2=Male
    3=Unknown or not reported
-->
<xs:simpleType name="SexType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="0"/>
        <xs:enumeration value="1"/>
        <xs:enumeration value="2"/>
        <xs:enumeration value="3"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define a Ethnicity type check
    Ethnicity  0=Previous unknown
                1=Hispanic
                2=Not Hispanic or Latino
                3=Unknown
-->
<xs:simpleType name="EthnicityType">
    <xs:restriction base="xs:byte">
        <xs:enumeration value="0"/>
        <xs:enumeration value="1"/>
        <xs:enumeration value="2"/>
        <xs:enumeration value="3"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define a Race type check
    Race      0=Previous unknown
                1=American Indian/Alaska Native
                2=Asian
                3=Native Hawaiian or Other Pacific Islander
                4=Black or African American
                5=White
                6=More than one race
                7=Unknown or not reported
-->
<xs:simpleType name="RaceType">
    <xs:restriction base="xs:byte">
        <xs:enumeration value="0"/>
        <xs:enumeration value="1"/>
        <xs:enumeration value="2"/>
        <xs:enumeration value="3"/>
        <xs:enumeration value="4"/>
        <xs:enumeration value="5"/>
        <xs:enumeration value="6"/>
        <xs:enumeration value="7"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define an Email type check
-->
<xs:simpleType name="EmailType">
    <xs:restriction base="xs:string">
        <xs:pattern value="([.a-zA-Z0-9_-])+@[a-zA-Z0-9_-]+(([a-zA-Z0-9_-])*(.[a-zA-Z0-9_-]))+/">
    </xs:restriction>
</xs:simpleType>
<!--
    Define a valid type check
-->
<xs:simpleType name="ValidType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="TRUE"/>
    </xs:restriction>
</xs:simpleType>
<!--
    Define the GCRC Report structure
-->

```

```

-->
<xs:element name="GCRCReport">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ANCILLARIES">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="ROWSET">
                            <xs:complexType>
                                <xs:sequence>
                                    <xs:element
name="ROW" maxOccurs="unbounded">
                                        <xs:complexType>
                                            <xs:sequence>
                                                <xs:element name="COSTCENT" type="arp:str25" nillable="true"/>
                                                <xs:element name="GROSS_AI1" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_BI1" type="xs:decimal" default="0"/>
                                                <xs:element name="ADJUSTI1" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_AI2" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_BI2" type="xs:decimal" default="0"/>
                                                <xs:element name="ADJUSTI2" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_AO1" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_BO1" type="xs:decimal" default="0"/>
                                                <xs:element name="ADJUSTO1" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_AO2" type="xs:decimal" default="0"/>
                                                <xs:element name="GROSS_BO2" type="xs:decimal" default="0"/>
                                                <xs:element name="ADJUSTO2" type="xs:decimal" default="0"/>
                                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                                            </xs:sequence>
                                        </xs:complexType>
                                    </xs:element>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:element>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="CCAPS">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element
name="ROW" maxOccurs="unbounded">
                            <xs:complexType>
                                <xs:sequence>

```

```

<xs:element name="CCAPS_NAM" type="arp:str35"/>
<xs:element name="START_DATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="END_DATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="SCIACT_TXT" type="arp:str100"/>
<xs:element name="CCAPSSPIDS" type="arp:str100"/>
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="CEN_IP">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="AGE" type="arp:str20"/>
<xs:element name="A ADM" type="xs:short" default="0"/>
<xs:element name="B ADM" type="xs:short" default="0"/>
<xs:element name="D ADM" type="xs:short" default="0"/>
<xs:element name="A_DAYS" type="xs:short" default="0"/>
<xs:element name="B_DAYS" type="xs:short" default="0"/>
<xs:element name="D_DAYS" type="xs:short" default="0"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="CEN_OP">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element name="ROW" maxOccurs="unbounded">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="LEN_STAY" type="arp:str20"/>
          <xs:element name="A_VISITS" type="xs:short" default="0"/>
          <xs:element name="B_VISITS" type="xs:short" default="0"/>
          <xs:element name="C_VISITS" type="xs:short" default="0"/>
          <xs:element name="D_VISITS" type="xs:short" default="0"/>
          <xs:element name="A_ORVS" type="xs:short" default="0"/>
          <xs:element name="B_ORVS" type="xs:short" default="0"/>
          <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:element name="ROWSET" maxOccurs="unbounded">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="ROW" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="AGE" type="arp:str20"/>
            <xs:element name="A_VISITS" type="xs:short" default="0"/>
            <xs:element name="B_VISITS" type="xs:short" default="0"/>
            <xs:element name="D_VISITS" type="xs:short" default="0"/>
            <xs:element name="A_ORVS" type="xs:short" default="0"/>
            <xs:element name="B_ORVS" type="xs:short" default="0"/>
            <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

                </xs:sequence>
            </xs:complexType>
        </xs:element>
        <xs:element name="CEN_PS">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element
name="ROW" maxOccurs="unbounded">
                                    <xs:complexType>
                                        <xs:sequence>
                                            <xs:element name="YR" type="xs:short" default="0"/>
                                            <xs:element name="MON" type="arp:MonthType" default="1"/>
                                            <xs:element name="DAYS_OPEN" type="arp:str3"/>
                                            <xs:element name="A_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="B_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="C_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="D_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="SA_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="SB_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="SD_DAYS" type="xs:short" default="0"/>
                                            <xs:element name="A_VISITS" type="xs:short" default="0"/>
                                            <xs:element name="B_VISITS" type="xs:short" default="0"/>
                                            <xs:element name="C_VISITS" type="xs:short" default="0"/>
                                            <xs:element name="D_VISITS" type="xs:short" default="0"/>
                                            <xs:element name="A_ORVS" type="xs:short" default="0"/>
                                            <xs:element name="B_ORVS" type="xs:short" default="0"/>
                                            <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                                        </xs:sequence>
                                    </xs:complexType>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:sequence>
                    <xs:element name="CEN_SB">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="ROWSET"
maxOccurs="unbounded">
                                    <xs:complexType>
                                        <xs:sequence>
                                            <xs:element
name="ROW" maxOccurs="unbounded">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element name="AGE" type="arp:str20"/>
    <xs:element name="A ADM" type="xs:short" default="0"/>
    <xs:element name="B ADM" type="xs:short" default="0"/>
    <xs:element name="D ADM" type="xs:short" default="0"/>
    <xs:element name="A_DAYS" type="xs:short" default="0"/>
    <xs:element name="B_DAYS" type="xs:short" default="0"/>
    <xs:element name="D_DAYS" type="xs:short" default="0"/>
    <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType maxOccurs="unbounded">
  <xs:sequence>
    <xs:element name="ROWSET">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="CENTER">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="ROW" maxOccurs="unbounded">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="AWRD_BEDS" type="xs:double" default="0"/>
                      <xs:element name="AWRD_IPA" type="xs:double" default="0"/>
                      <xs:element name="AWRD_IPB" type="xs:double" default="0"/>
                      <xs:element name="AWRD_IPC" type="xs:double" default="0"/>
                      <xs:element name="AWRD_IPD" type="xs:double" default="0"/>
                      <xs:element name="AWRD_SBA" type="xs:double" default="0"/>
                      <xs:element name="AWRD_SBB" type="xs:double" default="0"/>
                      <xs:element name="AWRD_SBD" type="xs:double" default="0"/>
                      <xs:element name="AWRD_OPA" type="xs:double" default="0"/>
                      <xs:element name="AWRD_OPB" type="xs:double" default="0"/>
                      <xs:element name="AWRD_OPC" type="xs:double" default="0"/>
                      <xs:element name="AWRD_OPD" type="xs:double" default="0"/>
                      <xs:element name="RATE_CHG" type="arp:LogicType" default="False"/>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

<xs:element name="RT_CHG_DAT" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="DISCRETE" type="arp:str3"/>
<xs:element name="CAMPDATAPATH" type="arp:str80"/>
<xs:element name="ARPDATAPATH" type="arp:str80"/>
<xs:element name="LEFTMARGIN" type="arp:str3"/>
<xs:element name="PAGELENGTH" type="xs:long" default="0"/>
<xs:element name="ARPPASSWORD" type="arp:str15"/>
<xs:element name="NIHFILESUFFIX" type="arp:str2"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="CMCAPS">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="ROW" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="CCAPS_NAM" type="arp:str35"/>
<xs:element name="START_DATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="END_DATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="SCIACT_TXT" type="xs:string" default="" nillable="true"/>
<xs:element name="CCAPSSPIDS" type="xs:string" default="" nillable="true"/>
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="CORELB">
<xs:complexType>
<xs:sequence>

```

```

        <xs:element name="ROWSET"
maxOccurs="unbounded">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="ROW" maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="TESTS" type="arp:str40"/>
                                <xs:element name="TESTNO" type="xs:short" default="0"/>
                                <xs:element name="CORELBSPIDS" type="xs:string" default="" />
                                <xs:element name="NonSPIDUsage" type="xs:string" default="" />
                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="ROWSET"
maxOccurs="unbounded">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="PERSON_ID" type="xs:long" default="0"/>
                    <xs:element name="MENTOR_ID" type="xs:long" default="0"/>
                    <xs:element name="SPECIALTY" type="arp:str4000"/>
                    <xs:element name="PERIOD_START" type="arp:DateColumnType" default="1800-12-31"/>
                    <xs:element name="PERIOD_END" type="arp:DateColumnType" default="1800-12-31"/>
                    <xs:element name="FUNDSREC" type="xs:long" default="0"/>
                    <xs:element name="PROJECT_TITLE" type="arp:str200"/>
                    <xs:element name="PROJECT_SUMMARY" type="arp:str4000"/>
                    <xs:element name="SPIDs" type="arp:str4000"/>
                    <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                    <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>

```

```

</xs:complexType>
                                </xs:element>
                                    </xs:sequence>
                                </xs:complexType>
                            </xs:element>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                    <xs:element name="DESMST">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="ROWSET"
maxOccurs="unbounded">
                                    <xs:complexType>
                                        <xs:sequence>
                                            <xs:element name="DESC" type="arp:str4000"/>
                                            <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                            <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                                        </xs:sequence>
                                    </xs:complexType>
                                </xs:element>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:element>
                        <xs:element name="FTE_STATS">
                            <xs:complexType>
                                <xs:sequence>
                                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                                        <xs:complexType>
                                            <xs:sequence>
                                                <xs:element name="ProgramDirectionFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="AdministrationFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="NutritionFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="InformaticsFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="BiostatisticianFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="NursingFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="RSAFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="CoreLabFTE" type="xs:decimal" default="0"/>
                                                <xs:element name="OtherFTE" type="xs:decimal" default="0"/>
                                            </xs:sequence>
                                        </xs:complexType>
                                    </xs:element>
                                    </xs:sequence>
                                </xs:complexType>
                            </xs:element>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>

```

```

<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="INVESTIG">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="LASTNAME" type="arp:str255"/>
<xs:element name="FIRSTNAME" type="arp:str255"/>
<xs:element name="MIDDLE" type="arp:str255"/>
<xs:element name="DEGREE" type="arp:DegreeType"/>
<xs:element name="DEPT" type="arp:str255"/>
<xs:element name="NONHOST" type="arp:str255"/>
<xs:element name="CAP" type="arp:LogicType" default="False"/>
<xs:element name="MCAP" type="arp:LogicType" default="False"/>
<xs:element name="CRS" type="arp:LogicType" default="False"/>
<xs:element name="CAMPName" type="arp:str255"/>
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
<xs:element name="NAME_SUFFIX" type="arp:str255"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="MEDSTU">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>

```

```

name="ROW" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="PERSON_ID" type="xs:short" default="0"/>
<xs:element name="MENTOR_ID" type="xs:short" default="0"/>
<xs:element name="DEGREES_SOUGHT" type="arp:str30"/>
<xs:element name="PERIOD_START" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="PERIOD_END" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="FUNDSREC" type="xs:long" default="0"/>
<xs:element name="PROJECT_TITLE" type="arp:str200"/>
<xs:element name="PROJECT_SUMMARY" type="xs:string" default="" />
<xs:element name="SPIDs" type="xs:string" default="" />
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="N_ADMIN">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="ADMIN_KEY" type="arp:str21"/>
<xs:element name="ADMIN_NAR" type="xs:string" default="" />
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

```

        </xs:element>
        <xs:element name="N_EQUP">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="EQUIP_NAME" type="xs:string" default="" />
                                <xs:element name="EQUIP_COST" type="xs:decimal" default="0" />
                                <xs:element name="SERIAL_NO" type="arp:str20" />
                                <xs:element name="JUSTIFICAT" type="xs:string" default="" />
                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false" />
                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false" />
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="N_GCRC">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET"
maxOccurs="unbounded">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="MEMBER_ID" type="xs:long" default="0" />
                        <xs:element name="CHAIRPERSON" type="arp:LogicType" default="False" />
                        <xs:element name="AREA_OF_EXPERTISE" type="arp:str100" />
                        <xs:element name="VOTING" type="arp:LogicType" default="False" />
                        <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false" />
                        <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false" />
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```

                </xs:sequence>
            </xs:complexType>
        </xs:element>
        <xs:element name="N_HILI">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="HILITITLE" type="arp:str35"/>
                                <xs:element name="KEYWORD1" type="arp:str3"/>
                                <xs:element name="KEYWORD2" type="arp:str3"/>
                                <xs:element name="KEYWORD3" type="arp:str3"/>
                                <xs:element name="SC_HILITES" type="xs:string" default="" />
                                <xs:element name="N_HILISPIDS" type="xs:string" default="" />
                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                    <xs:sequence>
                        <xs:element name="PC_CO1">
                            <xs:complexType>
                                <xs:sequence>
                                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                                        <xs:complexType>
                                            <xs:sequence>
                                                <xs:element name="SUPPLIER" type="arp:str50"/>
                                                <xs:element name="INPT_COST" type="xs:double" default="0"/>
                                                <xs:element name="OUTPT_COST" type="xs:double" default="0"/>
                                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                                            </xs:sequence>
                                        </xs:complexType>
                                    </xs:element>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:element>
                    </xs:sequence>
                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>

```

```

                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="PC_CO2">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET"
maxOccurs="unbounded">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="SUPPLIER" type="arp:str50"/>
                        <xs:element name="INPT_COST" type="xs:double" default="0"/>
                        <xs:element name="OUTPT_COST" type="xs:double" default="0"/>
                        <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                        <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="PC_CR1">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET"
maxOccurs="unbounded">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="SOURCE" type="arp:str50"/>
                        <xs:element name="IN_CREDIT" type="xs:double" default="0"/>
                        <xs:element name="OUT_CREDIT" type="xs:double" default="0"/>
                        <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                        <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>

```

```

                </xs:complexType>
            </xs:sequence>
        </xs:complexType>
        <xs:element name="PC_CR2">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="ROWSET"
maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element name="SOURCE" type="arp:str50"/>
                                <xs:element name="IN_CREDIT" type="xs:double" default="0"/>
                                <xs:element name="OUT_CREDIT" type="xs:double" default="0"/>
                                <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
                                <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                    </xs:sequence>
                </xs:complexType>
                <xs:element name="PCAPS">
                    <xs:complexType>
                        <xs:sequence>
                            <xs:element name="ROWSET"
maxOccurs="unbounded">
                                <xs:complexType>
                                    <xs:sequence>
                                        <xs:element name="PCAPS_NAM" type="arp:str35"/>
                                        <xs:element name="CURR_APP" type="arp:str35"/>
                                        <xs:element name="CURR_ADD" type="xs:string" default="" />
                                        <xs:element name="CURR_PHONE" type="arp:str14"/>
                                        <xs:element name="PER_TEACH" type="xs:double" default="0"/>
                                        <xs:element name="PER_CRES" type="xs:double" default="0"/>
                                        <xs:element name="PER_BRES" type="xs:double" default="0"/>
                                        <xs:element name="PER_PPRAC" type="xs:double" default="0"/>
                                        <xs:element name="PER_OTHER" type="xs:double" default="0"/>
                                    </xs:sequence>
                                </xs:complexType>
                            </xs:element>
                            </xs:sequence>
                        </xs:complexType>
                    </xs:element>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
    </xs:complexType>

```

```

<xs:element name="OTHER_SPEC" type="arp:str60"/>

<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>

<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>

</xs:sequence>

</xs:complexType>

</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="PCCAR1">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="PRO_RDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="PUB_RDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="RT_COST" type="xs:double" default="0"/>
<xs:element name="PD_A DAYS" type="xs:double" default="0"/>
<xs:element name="PD_COST" type="xs:double" default="0"/>
<xs:element name="SB_A DAYS" type="xs:double" default="0"/>
<xs:element name="SB_COST" type="xs:double" default="0"/>
<xs:element name="CR_B DAYS" type="xs:double" default="0"/>
<xs:element name="CR_B COST" type="xs:double" default="0"/>
<xs:element name="CR_C DAYS" type="xs:double" default="0"/>
<xs:element name="CR_C COST" type="xs:double" default="0"/>
<xs:element name="CR_D DAYS" type="xs:double" default="0"/>
<xs:element name="CR_D COST" type="xs:double" default="0"/>
<xs:element name="ANC_A DAYS" type="xs:double" default="0"/>
<xs:element name="ANC_A COST" type="xs:double" default="0"/>
<xs:element name="ANC_B DAYS" type="xs:double" default="0"/>
<xs:element name="ANC_B COST" type="xs:double" default="0"/>
<xs:element name="ANC_S BADAY" type="xs:double" default="0"/>
<xs:element name="ANC_S BACST" type="xs:double" default="0"/>
<xs:element name="ANC_S BB DAY" type="xs:double" default="0"/>

```

```

<xs:element name="ANC_SBBCST" type="xs:double" default="0"/>
<xs:element name="SP_CHG" type="xs:double" default="0"/>
<xs:element name="ANC_AVISIT" type="xs:double" default="0"/>
<xs:element name="ANC_AOCOST" type="xs:double" default="0"/>
<xs:element name="ANC_BVISIT" type="xs:double" default="0"/>
<xs:element name="ANC_BOCCOST" type="xs:double" default="0"/>
<xs:element name="OCR_BDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_BCOST" type="xs:double" default="0"/>
<xs:element name="OCR_CDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_CCOST" type="xs:double" default="0"/>
<xs:element name="OCR_DDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_DCOST" type="xs:double" default="0"/>
<xs:element name="ANC_ONLY_CHG" type="xs:double" default="0"/>
<xs:element name="ANC_ORVCOST" type="xs:double" default="0"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="PCCAR2">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="PRO_RDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="PUB_RDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="RT_COST" type="xs:double" default="0"/>
<xs:element name="PD_ADAYS" type="xs:double" default="0"/>
<xs:element name="PD_COST" type="xs:double" default="0"/>
<xs:element name="SB_ADAYS" type="xs:double" default="0"/>
<xs:element name="SB_COST" type="xs:double" default="0"/>
<xs:element name="CR_BDAYS" type="xs:double" default="0"/>

```

```

<xs:element name="CR_BCOST" type="xs:double" default="0"/>
<xs:element name="CR_CDAYS" type="xs:double" default="0"/>
<xs:element name="CR_CCOST" type="xs:double" default="0"/>
<xs:element name="CR_DDAYS" type="xs:double" default="0"/>
<xs:element name="CR_DCOST" type="xs:double" default="0"/>
<xs:element name="ANC_ADAYS" type="xs:double" default="0"/>
<xs:element name="ANC_ACOST" type="xs:double" default="0"/>
<xs:element name="ANC_BDAYS" type="xs:double" default="0"/>
<xs:element name="ANC_BCOST" type="xs:double" default="0"/>
<xs:element name="ANC_SBADAY" type="xs:double" default="0"/>
<xs:element name="ANC_SBACST" type="xs:double" default="0"/>
<xs:element name="ANC_SBBDAY" type="xs:double" default="0"/>
<xs:element name="ANC_SBBCST" type="xs:double" default="0"/>
<xs:element name="SP_CHG" type="xs:double" default="0"/>
<xs:element name="ANC_AVISIT" type="xs:double" default="0"/>
<xs:element name="ANC_AOCOST" type="xs:double" default="0"/>
<xs:element name="ANC_BVISIT" type="xs:double" default="0"/>
<xs:element name="ANC_BOCOST" type="xs:double" default="0"/>
<xs:element name="OCR_BDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_BCOST" type="xs:double" default="0"/>
<xs:element name="OCR_CDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_CCOST" type="xs:double" default="0"/>
<xs:element name="OCR_DDAYS" type="xs:double" default="0"/>
<xs:element name="OCR_DCOST" type="xs:double" default="0"/>
<xs:element name="ANC_ONLY_CHG" type="xs:double" default="0"/>
<xs:element name="ANC_ORVCOST" type="xs:double" default="0"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="PMCAPS">
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element name="ROW" maxOccurs="unbounded">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="PCAPS_NAM" type="arp:str35"/>
          <xs:element name="CURR_APP" type="arp:str35"/>
          <xs:element name="CURR_ADD" type="xs:string" default="" />
          <xs:element name="CURR_PHONE" type="arp:str14"/>
          <xs:element name="PER_TEACH" type="xs:double" default="0"/>
          <xs:element name="PER_CRES" type="xs:double" default="0"/>
          <xs:element name="PER_BRES" type="xs:double" default="0"/>
          <xs:element name="PER_PPRAC" type="xs:double" default="0"/>
          <xs:element name="PER_OTHER" type="xs:double" default="0"/>
          <xs:element name="OTHER_SPEC" type="arp:str60"/>
          <xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false"/>
          <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:element name="ROWSET" maxOccurs="unbounded">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="ROW" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="PUBTYPE" type="arp:str1"/>
            <xs:element name="PMID" type="xs:decimal" default="0"/>
            <xs:element name="PUBCREDIT" type="arp:LogicType" default="False"/>
            <xs:element name="PUBCAPS" type="arp:LogicType" default="False"/>
            <xs:element name="PUBSPIDS" type="xs:string" default="" />
            <xs:element name="AUTHORS" type="xs:string" default="" />
            <xs:element name="TITLE" type="xs:string" default="" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

<xs:element name="JOURNAL" type="xs:string" default="" />
<xs:element name="VOLUME" type="xs:string" default="" />
<xs:element name="PAGE" type="xs:string" default="" />
<xs:element name="PUBYEAR" type="xs:string" default="0" />
<xs:element name="ACCEPTDATE" type="arp:DateColumnType" default="1800-12-31" />
<!--xs:element name="UsedInpt" type="arp:LogicType" default="False" />
<xs:element name="UsedOutpt" type="arp:LogicType" default="False" />
<xs:element name="UsedCore" type="arp:LogicType" default="False" />
<xs:element name="UsedOther" type="arp:LogicType" default="False" />
<xs:element name="OtherSpec" type="arp:str50" />
<xs:element name="SORTFIELD" type="arp:str100" />
<xs:element name="SC_HILITE" type="xs:long" default="0" />
<xs:element name="PrintIndex" type="xs:short" default="0" />
<xs:element name="CAMPPublicat" type="xs:long" default="0" />
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false" />
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false" />
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="RSUPRT" type="arp:RSUPRTType" />
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET" type="arp:ROWSETType" />
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="ROW" type="arp:ROWType" />
name="ROW" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="INV_NO" type="xs:long" default="0" />
<xs:element name="KIND" type="arp:str3" />
<xs:element name="AGENCY" type="arp:str3" />
<xs:element name="GRANT" type="arp:str17" />
<xs:element name="TOT_FUNDS" type="xs:double" default="0" />
<xs:element name="GRANTSTART" type="arp:DateColumnType" default="1800-12-31" />
<xs:element name="GRANTEND" type="arp:DateColumnType" default="1800-12-31" />

```

```

<xs:element name="RSUPRTSPIDS" type="xs:string" default="" />
<xs:element name="ORG_NAME" type="arp:str100" />
<xs:element name="UNIQUEFIELD" type="xs:integer" nillable="false" />
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false" />
</xs:sequence>
</xs:complexType>
<xs:element name="ROWSET" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="ROW" maxOccurs="unbounded" />
<xs:complexType>
<xs:sequence>
<xs:element name="protocolid" type="arp:str12" />
<xs:element name="ethprot" type="xs:long" default="0" />
<xs:element name="patientid" type="arp:str255" />
<xs:element name="sex" type="arp:SexType" default="3" />
<xs:element name="age" type="xs:string" default="0" />
<xs:element name="ethnicity" type="arp:EthnicityType" default="3" />
<xs:element name="race" type="arp:RaceType" default="7" />
<xs:element name="patientname" type="xs:string" default="" />
<xs:element name="uniquefield" type="xs:integer" nillable="false" />
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false" />
</xs:sequence>
</xs:complexType>
<xs:element name="ROWSET" maxOccurs="unbounded" />
<xs:complexType>
<xs:sequence>
<xs:element name="SPJETH" />
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET" maxOccurs="unbounded" />
<xs:complexType>
<xs:sequence>
<xs:element name="SPJINV" />
<xs:complexType>
<xs:sequence>
<xs:element name="ROWSET" maxOccurs="unbounded" />
<xs:complexType>
<xs:sequence>

```

```

<xs:element
name="ROW" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="protocolid" type="arp:str12"/>
<xs:element name="inv_prot" type="xs:long" default="0"/>
<xs:element name="inv_no" type="xs:long" default="0"/>
<xs:element name="inv_type" type="arp:str3"/>
<xs:element name="uniquefield" type="xs:integer" nillable="false"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:complexType>
</xs:sequence>
<xs:element name="ROWSET"
maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element
name="ROW" maxOccurs="unbounded">
<xs:complexType>
<xs:sequence>
<xs:element name="PROTOCOL" type="arp:str12"/>
<xs:element name="SPID" type="arp:str4"/>
<xs:element name="SHORTTITLE" type="xs:string" default="" />
<xs:element name="LONGTITLE" type="xs:string" default="" />
<xs:element name="AIDS" type="arp:LogicType" default="False"/>
<!--<xs:element name="AXIS_I" type="arp:str30"/>
<xs:element name="AXIS_II" type="arp:str30"-->
<xs:element name="INPAT_A" type="xs:double" default="0"/>
<xs:element name="SCAT_A" type="xs:double" default="0"/>
<xs:element name="OUTPAT_A" type="xs:double" default="0"/>
<xs:element name="SCVS_A" type="xs:double" default="0"/>
<xs:element name="INPAT_B" type="xs:double" default="0"/>
<xs:element name="SCAT_B" type="xs:double" default="0"/>
<xs:element name="OUTPAT_B" type="xs:double" default="0"/>

```

```

<xs:element name="SCVS_B" type="xs:double" default="0"/>
<xs:element name="INPAT_D" type="xs:double" default="0"/>
<xs:element name="SCAT_D" type="xs:double" default="0"/>
<xs:element name="OUTPAT_D" type="xs:double" default="0"/>
<xs:element name="SCVS_D" type="xs:double" default="0"/>
<xs:element name="A_ORVS" type="xs:short" default="0"/>
<xs:element name="B_ORVS" type="xs:short" default="0"/>
<xs:element name="SYS_MAN" type="arp:LogicType" default="False"/>
<xs:element name="BIO_STAT" type="arp:LogicType" default="False"/>
<xs:element name="NUT_DEPT" type="arp:LogicType" default="False"/>
<xs:element name="CORE_LAB" type="arp:LogicType" default="False"/>
<xs:element name="SUMMARY" type="xs:string" default="" />
<xs:element name="RESULTS" type="xs:string" default="" />
<xs:element name="STARTDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="ENDDATE" type="arp:DateColumnType" default="1800-12-31"/>
<xs:element name="EXPNUMPATS" type="xs:double" default="0"/>
<xs:element name="ANCONLY" type="arp:LogicType" default="False"/>
<xs:element name="MULTICENTE" type="arp:LogicType" default="False"/>
<xs:element name="CLINTRIAL" type="arp:LogicType" default="False"/>
<xs:element name="PHASE" type="arp:str3"/>
<xs:element name="UNIQUEFIELD" type="xs:long" default="0"/>
<xs:element name="pi_last" type="arp:str255"/>
<xs:element name="pi_first" type="arp:str255"/>
<xs:element name="pi_middle" type="arp:str255"/>
<xs:element name="pi_degree" type="arp:str255"/>
<xs:element name="pi_dept" type="arp:str255"/>
<xs:element name="pi_nonhost" type="arp:str255"/>
<xs:element name="pi_cap" type="arp:LogicType" default="False"/>
<xs:element name="pi_mcap" type="arp:LogicType" default="False"/>
<xs:element name="pi_crs" type="arp:LogicType" default="False"/>
<xs:element name="num_inv" type="xs:long" default="0"/>
<xs:element name="numnonhost" type="xs:long" default="0"/>
<xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
</xs:sequence>
</xs:complexType>

```

```

                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="TPAGE">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET"
maxOccurs="unbounded">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="ROW" maxOccurs="unbounded">
                            <xs:complexType>
                                <xs:sequence>
                                    <xs:element name="GRANT_NO" type="arp:str15"/>
                                    <xs:element name="GRANT_TIT" type="arp:str70"/>
                                    <xs:element name="REC_INST" type="arp:str70"/>
                                    <xs:element name="HP_SCHOOL" type="arp:str70"/>
                                    <xs:element name="BEG_REP_D" type="arp:DateColumnType" default="1800-12-31"/>
                                    <xs:element name="END_REP_D" type="arp:DateColumnType" default="1800-12-31"/>
                                    <xs:element name="PD_ID" type="xs:long" default="0"/>
                                    <xs:element name="PD_TITLE" type="arp:str50"/>
                                    <xs:element name="SITE_PHONE" type="arp:str13"/>
                                    <xs:element name="EMAIL" type="arp:EmailType"/>
                                    <xs:element name="FAX" type="arp:str13"/>
                                    <xs:element name="TOTAL_INBEDS" type="arp:str3"/>
                                    <xs:element name="TOTAL_INBEDS_OUT" type="arp:str3"/>
                                    <xs:element name="TOTAL_OUT_ROOMS" type="arp:str3"/>
                                    <xs:element name="GrantNumber" type="arp:GrantNumberType" nillable="false"/>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:element>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:element name="FILES" minOccurs="0">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="ROWSET">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="ROW" maxOccurs="unbounded">
                            <xs:complexType>
                                <xs:sequence>

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element name="USER_FILENAME" type="arp:str50"/>
    <xs:element name="UID_FILENAME" type="arp:str100"/>
    <xs:element name="TABLE_NAME" type="arp:str25"/>
    <xs:element name="COLUMN_NAME" type="arp:str25"/>
    <xs:element name="GRANTNUMBER" type="arp:GrantNumberType" nillable="false"/>
    <xs:element name="VALID" type="arp:ValidType"/>
    <xs:element name="LOCATION" type="xs:decimal" default="0"/>
    <xs:element name="SPID" type="arp:str4"/>
    <xs:element name="UNIQUEFIELD" type="arp:str4"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ROWID" type="xs:string">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="USER_FILENAME" type="arp:str50"/>
      <xs:element name="UID_FILENAME" type="arp:str100"/>
      <xs:element name="TABLE_NAME" type="arp:str25"/>
      <xs:element name="COLUMN_NAME" type="arp:str25"/>
      <xs:element name="GRANTNUMBER" type="arp:GrantNumberType" nillable="false"/>
      <xs:element name="VALID" type="arp:ValidType"/>
      <xs:element name="LOCATION" type="xs:decimal" default="0"/>
      <xs:element name="SPID" type="arp:str4"/>
      <xs:element name="UNIQUEFIELD" type="arp:str4"/>
    </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

8.0 Appendix C – Sample XML

The XML file generated from the ARP database via the ARP2XML process is presented below. In order to provide the smallest document possible, some row data generated in the XML have been excised to only present two rows per table for this appendix.

```
<?xml version="1.0" encoding="UTF-8"?>
<arp:GCRCReport xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:arp="http://www.arpgcrc.nih.gov"
  xsi:schemaLocation="http://www.arpgcrc.nih.gov arp.xsd">
  <!--Created by ARP2XML version 1.0.18-->

  <arp:ANCILLARIES>
    <arp:ROWSET>
      <arp:ROW>
        <arp:COSTCENT>Cardiopulmonary</arp:COSTCENT>
        <arp:GROSS_AI1>18648</arp:GROSS_AI1>
        <arp:GROSS_BI1>0</arp:GROSS_BI1>
        <arp:ADJUSTI1>31.8</arp:ADJUSTI1>
        <arp:GROSS_AI2>0</arp:GROSS_AI2>
        <arp:GROSS_BI2>0</arp:GROSS_BI2>
        <arp:ADJUSTI2>0</arp:ADJUSTI2>
        <arp:GROSS_AO1>0</arp:GROSS_AO1>
        <arp:GROSS_BO1>0</arp:GROSS_BO1>
        <arp:ADJUSTO1>0</arp:ADJUSTO1>
        <arp:GROSS_AO2>0</arp:GROSS_AO2>
        <arp:GROSS_BO2>0</arp:GROSS_BO2>
        <arp:ADJUSTO2>0</arp:ADJUSTO2>
        <arp:UNIQUEFIELD>37</arp:UNIQUEFIELD>
        <arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
      </arp:ROW>
      <arp:ROW>
        <arp:COSTCENT>Electrocardiology</arp:COSTCENT>
        <arp:GROSS_AI1>89</arp:GROSS_AI1>
        <arp:GROSS_BI1>0</arp:GROSS_BI1>
        <arp:ADJUSTI1>43.79</arp:ADJUSTI1>
        <arp:GROSS_AI2>0</arp:GROSS_AI2>
        <arp:GROSS_BI2>0</arp:GROSS_BI2>
        <arp:ADJUSTI2>0</arp:ADJUSTI2>
        <arp:GROSS_AO1>0</arp:GROSS_AO1>
        <arp:GROSS_BO1>0</arp:GROSS_BO1>
        <arp:ADJUSTO1>0</arp:ADJUSTO1>
        <arp:GROSS_AO2>0</arp:GROSS_AO2>
        <arp:GROSS_BO2>0</arp:GROSS_BO2>
        <arp:ADJUSTO2>0</arp:ADJUSTO2>
        <arp:UNIQUEFIELD>38</arp:UNIQUEFIELD>
        <arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
      </arp:ROW>
    </arp:ROWSET>
  </arp:ANCILLARIES>
  <arp:CCAPS>
    <arp:ROWSET>
```

```

<arp:ROW>
<arp:CCAPS_NAM/>
<arp:START_DATE>1800-12-31</arp:START_DATE>
<arp:END_DATE>1800-12-31</arp:END_DATE>
<arp:SCIACT_TXT/>
<arp:CCAPSSPIDS/>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:CCAPS>

<arp:CEN_IP>

<arp:ROWSET>

<arp:ROW>
<arp:AGE>a. less than 1 year</arp:AGE>
<arp:A_ADM>0</arp:A_ADM>
<arp:B_ADM>0</arp:B_ADM>
<arp:D_ADM>0</arp:D_ADM>
<arp:A_DAYS>0</arp:A_DAYS>
<arp:B_DAYS>0</arp:B_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:AGE>b. 1 thru 12 years</arp:AGE>
<arp:A_ADM>0</arp:A_ADM>
<arp:B_ADM>0</arp:B_ADM>
<arp:D_ADM>0</arp:D_ADM>
<arp:A_DAYS>0</arp:A_DAYS>
<arp:B_DAYS>0</arp:B_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

<arp:CEN_IP>

<arp:CEN_OP>

<arp:ROWSET>

<arp:ROW>
<arp:LEN_STAY>a. < 1 hour</arp:LEN_STAY>
<arp:A_VISITS>361</arp:A_VISITS>
<arp:B_VISITS>86</arp:B_VISITS>
<arp:C_VISITS>0</arp:C_VISITS>
<arp:D_VISITS>6</arp:D_VISITS>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:LEN_STAY>b. >= 1 and <= 3</arp:LEN_STAY>
<arp:A_VISITS>2631</arp:A_VISITS>
<arp:B_VISITS>1</arp:B_VISITS>
<arp:C_VISITS>0</arp:C_VISITS>
<arp:D_VISITS>578</arp:D_VISITS>

```

```

<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:CEN_OP>

<arp:CEN_OPAGE>

<arp:ROWSET>

<arp:ROW>
<arp:AGE>a. less than 1 year</arp:AGE>
<arp:A_VISITS>255</arp:A_VISITS>
<arp:B_VISITS>0</arp:B_VISITS>
<arp:D_VISITS>0</arp:D_VISITS>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:AGE>b. 1 thru 12 years</arp:AGE>
<arp:A_VISITS>132</arp:A_VISITS>
<arp:B_VISITS>0</arp:B_VISITS>
<arp:D_VISITS>0</arp:D_VISITS>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:CEN_OPAGE>

<arp:CEN_PS>

<arp:ROWSET>

<arp:ROW>
<arp:YR>2</arp:YR>
<arp:MON>12</arp:MON>
<arp:DAY_SOPEN>25</arp:DAY_SOPEN>
<arp:A_DAYS>5</arp:A_DAYS>
<arp:B_DAYS>0</arp:B_DAYS>
<arp:C_DAYS>0</arp:C_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:SA_DAYS>0</arp:SA_DAYS>
<arp:SB_DAYS>0</arp:SB_DAYS>
<arp:SD_DAYS>0</arp:SD_DAYS>
<arp:A_VISITS>240</arp:A_VISITS>
<arp:B_VISITS>0</arp:B_VISITS>
<arp:C_VISITS>0</arp:C_VISITS>
<arp:D_VISITS>34</arp:D_VISITS>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:YR>3</arp:YR>
<arp:MON>1</arp:MON>
<arp:DAY_SOPEN>25</arp:DAY_SOPEN>

```

```

<arp:A_DAYS>12</arp:A_DAYS>
<arp:B_DAYS>0</arp:B_DAYS>
<arp:C_DAYS>0</arp:C_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:SA_DAYS>0</arp:SA_DAYS>
<arp:SB_DAYS>4</arp:SB_DAYS>
<arp:SD_DAYS>0</arp:SD_DAYS>
<arp:A_VISITS>295</arp:A_VISITS>
<arp:B_VISITS>0</arp:B_VISITS>
<arp:C_VISITS>0</arp:C_VISITS>
<arp:D_VISITS>47</arp:D_VISITS>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:CEN_PS>

<arp:CEN_SB>

<arp:ROWSET>

<arp:ROW>
<arp:AGE>a. less than 1 year</arp:AGE>
<arp:A ADM>0</arp:A ADM>
<arp:B ADM>41</arp:B ADM>
<arp:D ADM>0</arp:D ADM>
<arp:A_DAYS>0</arp:A_DAYS>
<arp:B_DAYS>45</arp:B_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:AGE>b. 1 thru 12 years</arp:AGE>
<arp:A ADM>0</arp:A ADM>
<arp:B ADM>0</arp:B ADM>
<arp:D ADM>0</arp:D ADM>
<arp:A_DAYS>0</arp:A_DAYS>
<arp:B_DAYS>0</arp:B_DAYS>
<arp:D_DAYS>0</arp:D_DAYS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:CEN_SB>

<arp:CENTER>

<arp:ROWSET>

<arp:ROW>
<arp:AWRD_BEDS>0</arp:AWRD_BEDS>
<arp:AWRD_IPA>149</arp:AWRD_IPA>
<arp:AWRD_IPB>0</arp:AWRD_IPB>
<arp:AWRD_IPC>0</arp:AWRD_IPC>
<arp:AWRD_IPD>0</arp:AWRD_IPD>
<arp:AWRD_SBA>0</arp:AWRD_SBA>
<arp:AWRD_SBB>0</arp:AWRD_SBB>
<arp:AWRD_SBD>0</arp:AWRD_SBD>

```

```

<arp:AWRD_OPA>3564</arp:AWRD_OPA>
<arp:AWRD_OPB>0</arp:AWRD_OPB>
<arp:AWRD_OPC>0</arp:AWRD_OPC>
<arp:AWRD_OPD>0</arp:AWRD_OPD>
<arp:RATE_CHG>False</arp:RATE_CHG>
<arp:RT_CHG_DAT>1800-12-31</arp:RT_CHG_DAT>
<arp:DISCRETE>4</arp:DISCRETE>
<arp:CAMPDATAPATH>I:\camp\dbf</arp:CAMPDATAPATH>
<arp:ARPDATAPATH>\gcrc_rpt\dbf</arp:ARPDATAPATH>
<arp:LEFTMARGIN>6</arp:LEFTMARGIN>
<arp:PAGELENGTH>83</arp:PAGELENGTH>
<arp:ARPPASSWORD>MHMC</arp:ARPPASSWORD>
<arp:NIHFILESUFFIX>MH</arp:NIHFILESUFFIX>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:CENTER>

<arp:CMCAPS>

<arp:ROWSET>

<arp:ROW>
<arp:CCAPS_NAM/>
<arp:START_DATE>1800-12-31</arp:START_DATE>
<arp:END_DATE>1800-12-31</arp:END_DATE>
<arp:SCIACT_TXT/>
<arp:CCAPSSPIDS/>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:CMCAPS>

<arp:CORELB>

<arp:ROWSET>

<arp:ROW>
<arp:TESTS>GCMS 2H5 glycerol</arp:TESTS>
<arp:TESTNO>387</arp:TESTNO>
<arp:CORELBSPIDS>9710,9718</arp:CORELBSPIDS>
<arp:NonSPIDUsage/>
<arp:UNIQUEFIELD>38</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:TESTS>GCMS 2H5 phenylalanine</arp:TESTS>
<arp:TESTNO>2072</arp:TESTNO>
<arp:CORELBSPIDS>9945,0139,0240,0256</arp:CORELBSPIDS>
<arp:NonSPIDUsage/>
<arp:UNIQUEFIELD>39</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:CORELB>

<arp:CRFF>

```

```

<arp:ROWSET>

  <arp:ROW>
    <arp:PERSON_ID>41</arp:PERSON_ID>
    <arp:MENTOR_ID>31</arp:MENTOR_ID>
    <arp:SPECIALTY>Neonatology</arp:SPECIALTY>
    <arp:PERIOD_START>4/1/2003</arp:PERIOD_START>
    <arp:PERIOD_END>3/31/2004</arp:PERIOD_END>
    <arp:FUNDSREC>20000</arp:FUNDSREC>
    <arp:PROJECT_TITLE>Metabolism of threonine in newborn infants</arp:PROJECT_TITLE>
    <arp:PROJECT_SUMMARY>5M01RR000080-41MH_2004100610444647_PROJECT_SUMMARY.txt</arp:PROJECT_SUMMARY>
    <arp:SPIDs>0256</arp:SPIDs>
    <arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
    <arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
  </arp:ROW>
  <arp:ROW>
    <arp:PERSON_ID>68</arp:PERSON_ID>
    <arp:MENTOR_ID>36</arp:MENTOR_ID>
    <arp:SPECIALTY>Nutrition</arp:SPECIALTY>
    <arp:PERIOD_START>4/1/2003</arp:PERIOD_START>
    <arp:PERIOD_END>3/31/2004</arp:PERIOD_END>
    <arp:FUNDSREC>19173</arp:FUNDSREC>
    <arp:PROJECT_TITLE>Body composition at three years in children born full term versus preterm</arp:PROJECT_TITLE>
    <arp:PROJECT_SUMMARY>5M01RR000080-41MH_2004100610444772_PROJECT_SUMMARY.txt</arp:PROJECT_SUMMARY>
    <arp:SPIDs>0255</arp:SPIDs>
    <arp:UNIQUEFIELD>3</arp:UNIQUEFIELD>
    <arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
  </arp:ROW>
</arp:ROWSET>

</arp:CRFF>

<arp:DESMST>

<arp:ROWSET>

  <arp:ROW>
    <arp:DESC>
    <arp:UNIQUEFIELD>3</arp:UNIQUEFIELD>
    <arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
  </arp:ROW>
</arp:ROWSET>

</arp:DESMST>

<arp:FTE_STATS>

<arp:ROWSET>

  <arp:ROW>
    <arp:ProgramDirectionFTE>0.25</arp:ProgramDirectionFTE>
    <arp:AdministrationFTE>0.5</arp:AdministrationFTE>
    <arp:NutritionFTE>1.35</arp:NutritionFTE>
    <arp:InformaticsFTE>0</arp:InformaticsFTE>
    <arp:BiostatisticianFTE>0</arp:BiostatisticianFTE>
    <arp:NursingFTE>9.75</arp:NursingFTE>
    <arp:RSAFTE>1</arp:RSAFTE>
    <arp:CoreLabFTE>2.25</arp:CoreLabFTE>
  </arp:ROW>
</arp:ROWSET>

```

```

<arp:OtherFTE>0</arp:OtherFTE>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:FTE_STATS>

<arp:INVESTIG>

<arp:ROWSET>

<arp:ROW>
<arp:LASTNAME>Ashmead</arp:LASTNAME>
<arp:FIRSTNAME>Graham</arp:FIRSTNAME>
<arp:MIDDLE/>
<arp:DEGREE>MD</arp:DEGREE>
<arp:DEPT>Ob/Gyn</arp:DEPT>
<arp:NONHOST/>
<arp:CAP>False</arp:CAP>
<arp:MCAP>False</arp:MCAP>
<arp:CRS>False</arp:CRS>
<arp:CAMPName>Ashmead, Graham</arp:CAMPName>
<arp:UNIQUEFIELD>69</arp:UNIQUEFIELD>
<arp:NAME_SUFFIX> </arp:NAME_SUFFIX>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:LASTNAME>Ballou</arp:LASTNAME>
<arp:FIRSTNAME>Stanley</arp:FIRSTNAME>
<arp:MIDDLE/>
<arp:DEGREE>MD</arp:DEGREE>
<arp:DEPT>Medicine-Rheumatology</arp:DEPT>
<arp:NONHOST/>
<arp:CAP>False</arp:CAP>
<arp:MCAP>False</arp:MCAP>
<arp:CRS>False</arp:CRS>
<arp:CAMPName>Ballou, Stanley</arp:CAMPName>
<arp:UNIQUEFIELD>16</arp:UNIQUEFIELD>
<arp:NAME_SUFFIX> </arp:NAME_SUFFIX>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

<arp:INVESTIG>

<arp:MEDSTU>

<arp:ROWSET>

<arp:ROW>
<arp:PERSON_ID>0</arp:PERSON_ID>
<arp:MENTOR_ID>0</arp:MENTOR_ID>
<arp:DEGREES_SOUGHT/>
<arp:PERIOD_START>1800-12-31</arp:PERIOD_START>
<arp:PERIOD_END>1800-12-31</arp:PERIOD_END>
<arp:FUNDSREC>0</arp:FUNDSREC>
<arp:PROJECT_TITLE/>
<arp:PROJECT_SUMMARY/>
<arp:SPIDs/>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>

```

```

</arp:ROW>
</arp:ROWSET>

</arp:MEDSTU>

<arp:N_ADMIN>

<arp:ROWSET>

<arp:ROW>
<arp:ADMIN_KEY>Research Bionutrition</arp:ADMIN_KEY>
<arp:ADMIN_NAR>5M01RR000080-41MH_2004100610444507_ADMIN_NAR.txt</arp:ADMIN_NAR>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:ADMIN_KEY>Biostatistician</arp:ADMIN_KEY>
<arp:ADMIN_NAR>5M01RR000080-41MH_20041006104445101_ADMIN_NAR.txt</arp:ADMIN_NAR>
<arp:UNIQUEFIELD>2</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

<arp:N_ADMIN>

<arp:N_EQUP>

<arp:ROWSET>

<arp:ROW>
<arp:EQUIP_NAME>YSI Glucose/Lactate analyzer</arp:EQUIP_NAME>
<arp:EQUIP_COST>9945.5</arp:EQUIP_COST>
<arp:SERIAL_NO/>
<arp:JUSTIFICAT>Emergency replacement of YSI glucose/lactate analyzer. The analyzer failed in March, 2004 and was determined to be beyond repair. The analyzer had been purchased in 1990.</arp:JUSTIFICAT>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:N_EQUP>

<arp:N_GCRC>

<arp:ROWSET>

<arp:ROW>
<arp:MEMBER_ID>0</arp:MEMBER_ID>
<arp:CHAIRPERSON>False</arp:CHAIRPERSON>
<arp:AREA_OF_EXPERTISE/>
<arp:VOTING>False</arp:VOTING>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:N_GCRC>

<arp:N_HILI>

<arp:ROWSET>

```

```

<arp:ROW>
<arp:HILTITLE>Bone Mineral Density</arp:HILTITLE>
<arp:KEYWORD1>10</arp:KEYWORD1>
<arp:KEYWORD2>26</arp:KEYWORD2>
<arp:KEYWORD3>44</arp:KEYWORD3>
<arp:SC_HILITES>5M01RR000080-41MH_20041006104446320_SC_HILITES.txt</arp:SC_HILITES>
<arp:N_HILISPIDS>9934</arp:N_HILISPIDS>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:N_HILI>

<arp:PC_CO1>

<arp:ROWSET>

<arp:ROW>
<arp:SUPPLIER>drug (9934)</arp:SUPPLIER>
<arp:INPT_COST>0</arp:INPT_COST>
<arp:OUTPT_COST>2889</arp:OUTPT_COST>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PC_CO1>

<arp:PC_CO2>

<arp:ROWSET>

<arp:ROW>
<arp:SUPPLIER/>
<arp:INPT_COST>0</arp:INPT_COST>
<arp:OUTPT_COST>0</arp:OUTPT_COST>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PC_CO2>

<arp:PC_CR1>

<arp:ROWSET>

<arp:ROW>
<arp:SOURCE>0030</arp:SOURCE>
<arp:IN_CREDIT>0</arp:IN_CREDIT>
<arp:OUT_CREDIT>450</arp:OUT_CREDIT>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:SOURCE>0122</arp:SOURCE>
<arp:IN_CREDIT>0</arp:IN_CREDIT>
<arp:OUT_CREDIT>132</arp:OUT_CREDIT>
<arp:UNIQUEFIELD>2</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>

```

```

</arp:ROW>
</arp:ROWSET>

</arp:PC_CR1>

<arp:PC_CR2>

<arp:ROWSET>

<arp:ROW>
<arp:SOURCE/>
<arp:IN_CREDIT>0</arp:IN_CREDIT>
<arp:OUT_CREDIT>0</arp:OUT_CREDIT>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PC_CR2>

<arp:PCAPS>

<arp:ROWSET>

<arp:ROW>
<arp:PCAPS_NAM/>
<arp:CURR_APP/>
<arp:CURR_ADD/>
<arp:CURR_PHONE/>
<arp:PER_TEACH>0</arp:PER_TEACH>
<arp:PER_CRES>0</arp:PER_CRES>
<arp:PER_BRES>0</arp:PER_BRES>
<arp:PER_PPRAC>0</arp:PER_PPRAC>
<arp:PER_OTHER>0</arp:PER_OTHER>
<arp:OTHER_SPEC/>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PCAPS>

<arp:PCCAR1>

<arp:ROWSET>

<arp:ROW>
<arp:PRO_RDATE>1800-12-31</arp:PRO_RDATE>
<arp:PUB_RDATE>9/29/2003</arp:PUB_RDATE>
<arp:RT_COST>0</arp:RT_COST>
<arp:PD_A DAYS>157</arp:PD_A DAYS>
<arp:PD_COST>519.53</arp:PD_COST>
<arp:SB_A DAYS>0</arp:SB_A DAYS>
<arp:SB_COST>0</arp:SB_COST>
<arp:CR_BDAYS>0</arp:CR_BDAYS>
<arp:CR_BCOST>0</arp:CR_BCOST>
<arp:CR_C DAYS>0</arp:CR_C DAYS>
<arp:CR_CCOST>0</arp:CR_CCOST>
<arp:CR_D DAYS>0</arp:CR_D DAYS>
<arp:CR_DCOST>0</arp:CR_DCOST>
<arp:ANC_A DAYS>157</arp:ANC_A DAYS>
<arp:ANC_ACOST>19845.71</arp:ANC_ACOST>

```

```

<arp:ANC_BDAYS>0</arp:ANC_BDAYS>
<arp:ANC_BCOST>0</arp:ANC_BCOST>
<arp:ANC_SBADAY>0</arp:ANC_SBADAY>
<arp:ANC_SBACST>0</arp:ANC_SBACST>
<arp:ANC_SBBDAY>45</arp:ANC_SBBDAY>
<arp:ANC_SBBCST>952.55</arp:ANC_SBBCST>
<arp:SP_CHG>404484</arp:SP_CHG>
<arp:ANC_AVISIT>3660</arp:ANC_AVISIT>
<arp:ANC_AOCOST>19671.11</arp:ANC_AOCOST>
<arp:ANC_BVISIT>87</arp:ANC_BVISIT>
<arp:ANC_BOCAST>24455.52</arp:ANC_BOCAST>
<arp:OCR_BDAYS>87</arp:OCR_BDAYS>
<arp:OCR_BCOST>0</arp:OCR_BCOST>
<arp:OCR_CDAYS>0</arp:OCR_CDAYS>
<arp:OCR_CCOST>0</arp:OCR_CCOST>
<arp:OCR_DDAYS>585</arp:OCR_DDAYS>
<arp:OCR_DCOST>0</arp:OCR_DCOST>
<arp:ANC_ONLY_CHG>896</arp:ANC_ONLY_CHG>
<arp:ANC_ORVCOST>0</arp:ANC_ORVCOST>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PCCAR1>

<arp:PCCAR2>

<arp:ROWSET>

<arp:ROW>
<arp:PRO_RDATE>1800-12-31</arp:PRO_RDATE>
<arp:PUB_RDATE>1800-12-31</arp:PUB_RDATE>
<arp:RT_COST>0</arp:RT_COST>
<arp:PD_ADAYS>0</arp:PD_ADAYS>
<arp:PD_COST>0</arp:PD_COST>
<arp:SB_ADAYS>0</arp:SB_ADAYS>
<arp:SB_COST>0</arp:SB_COST>
<arp:CR_BDAYS>0</arp:CR_BDAYS>
<arp:CR_BCOST>0</arp:CR_BCOST>
<arp:CR_CDAYS>0</arp:CR_CDAYS>
<arp:CR_CCOST>0</arp:CR_CCOST>
<arp:CR_DDAYS>0</arp:CR_DDAYS>
<arp:CR_DCOST>0</arp:CR_DCOST>
<arp:ANC_ADAYS>0</arp:ANC_ADAYS>
<arp:ANC_ACOST>0</arp:ANC_ACOST>
<arp:ANC_BDAYS>0</arp:ANC_BDAYS>
<arp:ANC_BCOST>0</arp:ANC_BCOST>
<arp:ANC_SBADAY>0</arp:ANC_SBADAY>
<arp:ANC_SBACST>0</arp:ANC_SBACST>
<arp:ANC_SBBDAY>0</arp:ANC_SBBDAY>
<arp:ANC_SBBCST>0</arp:ANC_SBBCST>
<arp:SP_CHG>0</arp:SP_CHG>
<arp:ANC_AVISIT>0</arp:ANC_AVISIT>
<arp:ANC_AOCOST>0</arp:ANC_AOCOST>
<arp:ANC_BVISIT>0</arp:ANC_BVISIT>
<arp:ANC_BOCAST>0</arp:ANC_BOCAST>
<arp:OCR_BDAYS>0</arp:OCR_BDAYS>
<arp:OCR_BCOST>0</arp:OCR_BCOST>
<arp:OCR_CDAYS>0</arp:OCR_CDAYS>
<arp:OCR_CCOST>0</arp:OCR_CCOST>
<arp:OCR_DDAYS>0</arp:OCR_DDAYS>
<arp:OCR_DCOST>0</arp:OCR_DCOST>

```

```

<arp:ANC_ONLY_CHG>0</arp:ANC_ONLY_CHG>
<arp:ANC_ORVCOST>0</arp:ANC_ORVCOST>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PCCAR2>

<arp:PMCAPS>

<arp:ROWSET>

<arp:ROW>
<arp:PCAPS_NAM/>
<arp:CURR_APP/>
<arp:CURR_ADD/>
<arp:CURR_PHONE/>
<arp:PER_TEACH>0</arp:PER_TEACH>
<arp:PER_CRES>0</arp:PER_CRES>
<arp:PER_BRES>0</arp:PER_BRES>
<arp:PER_PPRAC>0</arp:PER_PPRAC>
<arp:PER_OTHER>0</arp:PER_OTHER>
<arp:OTHER_SPEC/>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PMCAPS>

<arp:PUB>

<arp:ROWSET>

<arp:ROW>
<arp:PUBTYPE>J</arp:PUBTYPE>
<arp:PMID>0</arp:PMID>
<arp:PUBCREDIT>True</arp:PUBCREDIT>
<arp:PUBCAPS>False</arp:PUBCAPS>
<arp:PUBSPIDS>9612</arp:PUBSPIDS>
<arp:AUTHORS>Agarwal S, Triolo RJ, Kobetic R, Miller M, Bieri C, Kukke S, Rohde L, Davis JA Jr</arp:AUTHORS>
<arp:TITLE>Long-term user perceptions of an implanted neuroprosthesis for exercise, standing, and transfers after spinal cord injury</arp:TITLE>
<arp:JOURNAL>J Rehabil Res Dev</arp:JOURNAL>
<arp:VOLUME>40(3)</arp:VOLUME>
<arp:PAGE>241-52. PMID: 14582528</arp:PAGE>
<arp:PUBYEAR>2003</arp:PUBYEAR>
<arp:ACCEPTDATE>1800-12-31</arp:ACCEPTDATE>
<arp:SORTFIELD>Agarwal S, Triolo RJ, Kobetic R, Miller M, Bieri C, Kukke S, Rohde L, Davis JA Jr</arp:SORTFIELD>
<arp:SC_HILITE>0</arp:SC_HILITE>
<arp:PrintIndex>1</arp:PrintIndex>
<arp:CAMPPublicat>273</arp:CAMPPublicat>
<arp:UNIQUEFIELD>60</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:PUBTYPE>J</arp:PUBTYPE>
<arp:PMID>0</arp:PMID>
<arp:PUBCREDIT>True</arp:PUBCREDIT>
<arp:PUBCAPS>False</arp:PUBCAPS>

```

```

<arp:PUBSPIDS>9718,9710</arp:PUBSPIDS>
<arp:AUTHORS>Catalano PM, Kirwan JP, Haugel-de Mouzon S, King J</arp:AUTHORS>
<arp:TITLE>Gestational diabetes and insulin resistance: role in short- and long- term implications for mother and fetus</arp:TITLE>
<arp:JOURNAL>J Nutr</arp:JOURNAL>
<arp:VOLUME>133(5)</arp:VOLUME>
<arp:PAGE>1674S-1683S. PMID: 14582528</arp:PAGE>
<arp:PUBYEAR>2003</arp:PUBYEAR>
<arp:ACCEPTDATE>1800-12-31</arp:ACCEPTDATE>
<arp:SORTFIELD>Catalano PM, Kirwan JP, Haugel-de Mouzon S, King J. Gestational diabetes and ins</arp:SORTFIELD>
<arp:SC_HILITE>0</arp:SC_HILITE>
<arp:PrintIndex>2</arp:PrintIndex>
<arp:CAMPPublicat>286</arp:CAMPPublicat>
<arp:UNIQUEFIELD>61</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:PUB>

<arp:RSUPRT>

<arp:ROWSET>

<arp:ROW>
<arp:INV_NO>16</arp:INV_NO>
<arp:KIND>3</arp:KIND>
<arp:AGENCY>0</arp:AGENCY>
<arp:GRANT>5129</arp:GRANT>
<arp:TOT_FUNDS>6000</arp:TOT_FUNDS>
<arp:GRANTSTART>1/31/2003</arp:GRANTSTART>
<arp:GRANTEND>12/31/2003</arp:GRANTEND>
<arp:RSUPRTSPIDS>0245</arp:RSUPRTSPIDS>
<arp:ORG_NAME>LaJolla Pharm</arp:ORG_NAME>
<arp:UNIQUEFIELD>51</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:INV_NO>4</arp:INV_NO>
<arp:KIND>4</arp:KIND>
<arp:AGENCY>0</arp:AGENCY>
<arp:GRANT>60907</arp:GRANT>
<arp:TOT_FUNDS>45000</arp:TOT_FUNDS>
<arp:GRANTSTART>5/4/1999</arp:GRANTSTART>
<arp:GRANTEND>8/31/2004</arp:GRANTEND>
<arp:RSUPRTSPIDS>9814</arp:RSUPRTSPIDS>
<arp:ORG_NAME>Northwestern University Subcontract</arp:ORG_NAME>
<arp:UNIQUEFIELD>53</arp:UNIQUEFIELD>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:RSUPRT>

<arp:SPJETH>

<arp:ROWSET>

<arp:ROW>
<arp:protocolid>98-14</arp:protocolid>

```

```

<arp:ethprot>77</arp:ethprot>
<arp:patientid> </arp:patientid>
<arp:sex>1</arp:sex>
<arp:age>19.5</arp:age>
<arp:ethnicity>2</arp:ethnicity>
<arp:race>5</arp:race>
<arp:patientname> </arp:patientname>
<arp:uniquefield>9362</arp:uniquefield>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:protocolid>01-26</arp:protocolid>
<arp:ethprot>18</arp:ethprot>
<arp:patientid> </arp:patientid>
<arp:sex>2</arp:sex>
<arp:age>74.1</arp:age>
<arp:ethnicity>2</arp:ethnicity>
<arp:race>6</arp:race>
<arp:patientname> </arp:patientname>
<arp:uniquefield>9363</arp:uniquefield>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:SPJETH>

<arp:SPJINV>

<arp:ROWSET>

<arp:ROW>
<arp:protocolid>00-01</arp:protocolid>
<arp:inv_prot>1</arp:inv_prot>
<arp:inv_no>2</arp:inv_no>
<arp:inv_type>2</arp:inv_type>
<arp:uniquefield>605</arp:uniquefield>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:protocolid>00-01</arp:protocolid>
<arp:inv_prot>1</arp:inv_prot>
<arp:inv_no>3</arp:inv_no>
<arp:inv_type>1</arp:inv_type>
<arp:uniquefield>606</arp:uniquefield>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:SPJINV>

<arp:SPJPRO>

<arp:ROWSET>

<arp:ROW>
<arp:PROTOCOL>00-01</arp:PROTOCOL>
<arp:SPID>6001</arp:SPID>
<arp:SHORTTITLE>Warfarin vs aspirin for symptomatic intracranial disease (WASID)</arp:SHORTTITLE>
<arp:LONGTITLE>WASID-Warfarin vs aspirin for symptomatic intracranial disease study: A five-year multicenter clinical trial</arp:LONGTITLE>
<arp:AIDS>False</arp:AIDS>

```

```

<arp:INPAT_A>0</arp:INPAT_A>
<arp:SCAT_A>0</arp:SCAT_A>
<arp:OUTPAT_A>97</arp:OUTPAT_A>
<arp:SCVS_A>0</arp:SCVS_A>
<arp:INPAT_B>0</arp:INPAT_B>
<arp:SCAT_B>0</arp:SCAT_B>
<arp:OUTPAT_B>0</arp:OUTPAT_B>
<arp:SCVS_B>1</arp:SCVS_B>
<arp:INPAT_D>0</arp:INPAT_D>
<arp:SCAT_D>0</arp:SCAT_D>
<arp:OUTPAT_D>0</arp:OUTPAT_D>
<arp:SCVS_D>0</arp:SCVS_D>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:SYS_MAN>False</arp:SYS_MAN>
<arp:BIO_STAT>False</arp:BIO_STAT>
<arp:NUT_DEPT>False</arp:NUT_DEPT>
<arp:CORE_LAB>True</arp:CORE_LAB>
<arp:SUMMARY>5M01RR000080-41MH_20041006104447507_SUMMARY.txt</arp:SUMMARY>
<arp:RESULTS/>
<arp:STARTDATE>11/15/1999</arp:STARTDATE>
<arp:ENDDATE>6/30/2004</arp:ENDDATE>
<arp:EXPNUMPATS>16</arp:EXPNUMPATS>
<arp:ANONLY>False</arp:ANONLY>
<arp:MULTICENTE>True</arp:MULTICENTE>
<arp:CLINTRIAL>True</arp:CLINTRIAL>
<arp:PHASE>4</arp:PHASE>
<arp:UNIQUEFIELD>1</arp:UNIQUEFIELD>
<arp:pi_last>Hanna</arp:pi_last>
<arp:pi_first>Joseph</arp:pi_first>
<arp:pi_middle/>
<arp:pi_degree>MD</arp:pi_degree>
<arp:pi_dept>Neurology</arp:pi_dept>
<arp:pi_nonhost/>
<arp:pi_cap>False</arp:pi_cap>
<arp:pi_mcap>False</arp:pi_mcap>
<arp:pi_crs>False</arp:pi_crs>
<arp:num_inv>3</arp:num_inv>
<arp:numnonhost>0</arp:numnonhost>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
<arp:ROW>
<arp:PROTOCOL>00-05</arp:PROTOCOL>
<arp:SPID>0005</arp:SPID>
<arp:SHORTTITLE>Placental glucose transport in diabetic pregnancies</arp:SHORTTITLE>
<arp:LONGTITLE>Placental glucose transport in diabetic pregnancies</arp:LONGTITLE>
<arp:AIDS>False</arp:AIDS>
<arp:INPAT_A>0</arp:INPAT_A>
<arp:SCAT_A>0</arp:SCAT_A>
<arp:OUTPAT_A>29</arp:OUTPAT_A>
<arp:SCVS_A>0</arp:SCVS_A>
<arp:INPAT_B>0</arp:INPAT_B>
<arp:SCAT_B>0</arp:SCAT_B>
<arp:OUTPAT_B>0</arp:OUTPAT_B>
<arp:SCVS_B>0</arp:SCVS_B>
<arp:INPAT_D>0</arp:INPAT_D>
<arp:SCAT_D>0</arp:SCAT_D>
<arp:OUTPAT_D>0</arp:OUTPAT_D>
<arp:SCVS_D>0</arp:SCVS_D>
<arp:A_ORVS>0</arp:A_ORVS>
<arp:B_ORVS>0</arp:B_ORVS>
<arp:SYS_MAN>False</arp:SYS_MAN>

```

```

<arp:BIO_STAT>False</arp:BIO_STAT>
<arp:NUT_DEPT>True</arp:NUT_DEPT>
<arp:CORE_LAB>True</arp:CORE_LAB>
<arp:SUMMARY>5M01RR000080-41MH_20041006104447757_SUMMARY.txt</arp:SUMMARY>
<arp:RESULTS/>
<arp:STARTDATE>12/20/1999</arp:STARTDATE>
<arp:ENDDATE>12/30/2004</arp:ENDDATE>
<arp:EXPNUMPATS>150</arp:EXPNUMPATS>
<arp:ANONLY>False</arp:ANONLY>
<arp:MULTICENTE>False</arp:MULTICENTE>
<arp:CLINTRIAL>False</arp:CLINTRIAL>
<arp:PHASE>0</arp:PHASE>
<arp:UNIQUEFIELD>2</arp:UNIQUEFIELD>
<arp:pi_last>Catalano</arp:pi_last>
<arp:pi_first>Patrick</arp:pi_first>
<arp:pi_middle>M.</arp:pi_middle>
<arp:pi_degree>MD</arp:pi_degree>
<arp:pi_dept>Ob/Gyn</arp:pi_dept>
<arp:pi_nonhost/>
<arp:pi_cap>False</arp:pi_cap>
<arp:pi_mcap>False</arp:pi_mcap>
<arp:pi_crs>False</arp:pi_crs>
<arp:num_inv>2</arp:num_inv>
<arp:numnonhost>1</arp:numnonhost>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>

</arp:ROWSET>

</arp:SPJPRO>

<arp:TPAGE>

<arp:ROWSET>

<arp:ROW>
<arp:GRANT_NO>5M01RR 00080-41</arp:GRANT_NO>
<arp:GRANT_TIT>General Clinical Research Center - MetroHealth Medical Center Satell</arp:GRANT_TIT>
<arp:REC_INST>Case Western Reserve University</arp:REC_INST>
<arp:HP_SCHOOL>School of Medicine</arp:HP_SCHOOL>
<arp:BEG REP_D>12/1/2002</arp:BEG REP_D>
<arp:END REP_D>3/31/2004</arp:END REP_D>
<arp:PD_ID>59</arp:PD_ID>
<arp:PD_TITLE>Professor of Medicine</arp:PD_TITLE>
<arp:SITE_PHONE>(216)778-5462</arp:SITE_PHONE>
<arp:EMAIL>jpd@case.edu</arp:EMAIL>
<arp:FAX>(216)778-4691</arp:FAX>
<arp:TOTAL_INBEDS>4</arp:TOTAL_INBEDS>
<arp:TOTAL_INBEDS_OUT>
<arp:TOTAL_OUT_ROOMS>6</arp:TOTAL_OUT_ROOMS>
<arp:GrantNumber>5M01RR000080-41MH</arp:GrantNumber>
</arp:ROW>
</arp:ROWSET>

</arp:TPAGE>
<arp:FILES>

<arp:ROWSET>

<arp:ROW>
<arp:USER_FILENAME>Summary20040814.pdf</arp:USER_FILENAME>

```

```

<arp:UID_FILENAME>5M01RR000032-
43_20041119212721328_SUMMARY_Summary20040814.pdf</arp:UID_FILENAME>
<arp:TABLE_NAME>spjpro</arp:TABLE_NAME>
<arp:COLUMN_NAME>SUMMARY</arp:COLUMN_NAME>
<arp:GRANTNUMBER>5M01RR000032-43</arp:GRANTNUMBER>
<arp:VALID>FALSE</arp:VALID>
<arp:LOCATION>1</arp:LOCATION>
<arp:SPID>0889</arp:SPID>
<arp:UNIQUEFIELD>40</arp:UNIQUEFIELD>
</arp:ROW>
<arp:ROW>
<arp:USER_FILENAME>DOMXSLTXPathRef.pdf</arp:USER_FILENAME>
<arp:UID_FILENAME>5M01RR000032-
43_20041119212721328_SUMMARY_DOMXSLTXPathRef.pdf</arp:UID_FILENAME>
<arp:TABLE_NAME>spjpro</arp:TABLE_NAME>
<arp:COLUMN_NAME>SUMMARY</arp:COLUMN_NAME>
<arp:GRANTNUMBER>5M01RR000032-43</arp:GRANTNUMBER>
<arp:VALID>FALSE</arp:VALID>
<arp:LOCATION>2</arp:LOCATION>
<arp:SPID>0889</arp:SPID>
<arp:UNIQUEFIELD>40</arp:UNIQUEFIELD>
</arp:ROW>
<arp:ROW>
<arp:USER_FILENAME>lecture5_6up.pdf</arp:USER_FILENAME>
<arp:UID_FILENAME>5M01RR000032-
43_20041119212721578_SUMMARY_lecture5_6up.pdf</arp:UID_FILENAME>
<arp:TABLE_NAME>spjpro</arp:TABLE_NAME>
<arp:COLUMN_NAME>SUMMARY</arp:COLUMN_NAME>
<arp:GRANTNUMBER>5M01RR000032-43</arp:GRANTNUMBER>
<arp:VALID>FALSE</arp:VALID>
<arp:LOCATION>1</arp:LOCATION>
<arp:SPID>0948</arp:SPID>
<arp:UNIQUEFIELD>68</arp:UNIQUEFIELD>
</arp:ROW>
</arp:ROWSET>

</arp:FILES>

</arp:GCRCReport>

```